Highway 246 Passing Lanes Project

In Santa Barbara County, California
Between the cities of Lompoc and Buellton,
from 0.3 mile west of Purisima Road to
0.2 mile east of Domingos Road

05-SB-246-PM 11.8/R20.9 05-0C6400

SCH# 2009081063

Initial Study with Mitigated Negative Declaration/Environmental Assessment with Finding of No Significant Impact



Prepared by the State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the California Department of Transportation under its assumption of responsibility pursuant to 23 U.S. Code 327

June 2010



General Information About This Document

What's in this document?

This document contains a Mitigated Negative Declaration and Finding of No Significant Impact, which examine the environmental effects of a proposed project on Highway 246 in Santa Barbara County.

The Initial Study/Environmental Assessment was circulated to the public from August 18, 2009 to September 17, 2009. A public hearing was held Wednesday, September 2, 2009, from 5:30 p.m. to 8:30 p.m. in the Lompoc City Council Chambers at 100 Civic Center Plaza in Lompoc. Comments received during the public comment period were taken into consideration. Comments received and responses to comments are shown in the Comments and Responses section of this document (Appendix H). This section has been added since the draft was circulated. Appendices I (Opportunity for Noise Berm letter/response) and J (Biological Opinion Issued by U.S. Fish and Wildlife Service) have also been added since the draft was circulated. Elsewhere in the document, a vertical line in the margin indicates changes or additions made since the draft document was circulated.

What happens after this?

The proposed project has completed environmental compliance after the circulation of this document. When funding is approved, the California Department of Transportation, as assigned by the Federal Highway Administration, can design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Matt Fowler, 50 Higuera Street, San Luis Obispo, CA 93401; (805) 542-4603 Voice, or use the California Relay Service TTY number, 1 (800) 735-2929 or 711.

SCH# 2009081063 05-SB-246-PM 11.8/R20.9

Construct two sets (one lane in each direction) of passing lanes, one set at the eastern end of the project limits, the other set toward the wet end of the project along Highway 246 between Purisima Road and Domingos Road (from post mile 11.8 to R20.9), construct left-turn pockets at four locations, and construct a continuous left-turn lane within the project limits.

INITIAL STUDY with Mitigated Negative Declaration /ENVIRONMENTAL ASSESSMENT with Finding of No **Significant Impact**

Submitted Pursuant to: (State) Division 13, California Public Resources Code (Federal) 42 USC 4332(2)(C) and 23 U.S. Code 327

> THE STATE OF CALIFORNIA Department of Transportation

Righard Krumholz

District 5 Director

California Department of Transportation

Finding of No Significant Impact

FOR

The Highway 246 Passing Lanes Project on Highway 246 between post miles 11.8 and R.20.9 in Santa Barbara County

The California Department of Transportation (Caltrans) has determined that the Build Alternative, which includes two sets of passing lanes and several left-turn pockets will have no significant impact on the human environment. This Finding of No Significant Impact is based on the attached Environmental Assessment, which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached Environmental Assessment and incorporated technical reports.

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327.

Date

6/16/10

Richard Krumholz District Director

California Department of Transportation

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to construct two sets (one lane in each direction) of passing lanes along Highway 246 beginning east of Purisima Road and ending at Domingos Road (post mile 11.8 to R20.9). The passing lanes would vary in length from 1.4 miles to 1.7 miles. Left-turn pockets would be installed at four intersections. The highway would be realigned to the south at Tularosa Road and a road profile correction would be made. A two-way continuous left-turn lane would be constructed from Hapgood Road (West) to 3,800 feet west of Campbell Road. A Class III bike route would be maintained within the project limits. Drainage features would be improved throughout the project area.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined from that the proposed project would not have a significant effect on the environment for the following reasons:

• The proposed project would have no effect on: publicly owned park or recreational areas, farmland, archaeological or historic resources, communities, coastal resources, housing, environmental justice, employment/economy, paleontological resources. The proposed project would not conflict with local plans. The proposed project would have no significant impact on utilities, floodplains/hydraulics, water quality, climate change, hazardous wastes, or air quality.

In addition, the proposed project would have no significantly adverse impacts on endangered species, wetlands, riparian areas, noise levels, geology/soils or visual resources, because the following mitigation measures would reduce potential effects to insignificance:

- To mitigate impacts to visual resources resulting from increased pavement, a profile change, cut slopes and removal of trees, the project would include replacing trees at a 10:1 ratio within the project limits. The tree planting would be heavily concentrated in the area of Tularosa Road where there would be large cut slopes and benches. Slopes would be benched and contours would be rounded to create a natural appearance.
- To mitigate permanent adverse impacts to California tiger salamander that could result from grading, paving, and other structural modification to upland habitat at the five locations where California tiger salamander were documented to occur, an extensive wildlife under crossing system, (viaduct and eighteen culverts) is now part of the project. In addition, Environmental Sensitive Areas will be identified on the plans to ensure that habitat areas are not impacted during construction.
- Restoring degraded waterways in the right-of-way, within the project limits, would mitigate permanent impacts to waters of the U.S. and riparian areas. Temporary impacts to riparian areas (and waters of the U.S.) will be restored to original contours and revegetated with native species in coordination with the Army Corps of Engineers, the Regional Water Quality Control Board and the California Department of Fish and Game during the permit process. The temporary impacts to wetlands will occur at the fringe of the Campbell Ponds. This area will be restored to original contours after construction activities and left to naturalize from the plentiful wetland vegetation that occurs around the remainder of the undisturbed pond. Environmentally Sensitive Areas will be identified on the plans to avoid any equipment storage or staging in riparian areas. Staging areas will occur only in upland areas.
- To mitigate impacts to geology/soils, landform grading and a revegetation plan would address the cut slopes and decrease the potential of erosion.

6/15/14

Acting Office Chief,

Central Region Environmental South

Summary

The California Department of Transportation (Caltrans) proposes to construct two sets (one lane in each direction) of passing lanes, one set at the western end of the project limits, the other set toward the eastern end, along a 9-mile section of Highway 246 in Santa Barbara County, between Lompoc and Buellton. The passing lanes would vary in length from 1.4 miles to 1.7 miles. The project begins east of Cebada Road and ends at Domingos Road (project limits extend from post mile 11.8 to R20.9). Left-turn pocket improvements would be constructed at four locations within the project limits. The project would also correct the road profile and realign the highway at Tularosa Road, construct a two-way continuous left-turn lane, and maintain a Class III bike route within the project limits. Drainage improvements would be built throughout the project limits.

Several alternatives were considered, including a four-lane widening of the entire 9-mile stretch, and variations of the passing lanes/left-turn pockets improvements of intersections. In the draft environmental document, one Build Alternative was carried forward along with the No-Build Alternative. The Build Alternative combines the set of two passing lanes and left-turn pocket improvements along the 9-mile section of highway.

On the next page, Table S.1 summarizes the potential environmental impacts.

The Build Alternative was selected as the Preferred Alternative.

S.1 Summary of Major Potential Impacts from Alternatives

Potential Impact		Build Alternative	No-Build Alternative
Land Use	Consistency with SB Co. General Plan	Consistent	Consistent
Growth		Proposed project would accommodate predicted growth planned for by the Santa Barbara County Association of Governments.	No change
Utilities/E Services	Emergency	No relocation of utilities is anticipated with the exception of several power poles.	No change
Traffic a Transpo Pedestri Facilities	rtation/ an and Bicycle	Would improve mainline operations by providing safer passing opportunities, and reduce conflicts at several intersections.	Operations would degrade as the number of motorists using the highway increase. Conflicts at intersections would increase.
Visual/A	esthetics	Project could impact visual resources without the addition of minimization and mitigation measures.	No change
Hydrolog Floodpla		Proposed improvements to three culverts would prevent impacts to the floodplain.	No change
	Quality and Water Runoff Incorporating drainage improvements that are part of the project, while using best management practices would offset impacts to water quality during grading.		Drainage improvements would not be made. No impacts would occur from grading and cut slopes.
Geology Seismic/	/Soils/ Topography	Project has potential for soil erosion. Measures would be incorporated into the project to address.	No change
Hazardo Waste/M		Testing of bridge for asbestos containing materials would be necessary	No change
Air Quali	ity	Standard specifications would be adhered to in order to address dust.	No impacts
Noise ar	nd Vibration	A noise barrier was proposed for one residence along Highway 246, near Hapgood Road. A letter was sent to the property owner to inform and determine interest. The property owner declined the noise berm.	No change
Natural (Communities	Project would impact coast live oak trees. 10:1 tree replacement would offset this loss.	No impacts to trees
Wetlands, Other Waters and Riparian		Permanent and temporary impacts to waters of the U.S./riparian areas along with temporary impacts to wetlands would occur. Restoring degraded waterways within right-of-way would offset permanent impacts. Riparian/wetland areas affected during construction will be restored to original contours, and then revegetated with native species.	No impacts to other waters of the U.S. or wetlands would occur.
Animal S	Species	With minimization measures added to project, no impacts are anticipated to species of special concern.	No impacts
Threatened and Endangered Species		Impacts to California tiger salamander habitat would be offset by constructing a viaduct and number of undercrossings at various locations in the vicinity of Campbell Pond.	No change from existing situation.
Invasive Species		Measures would be included to avoid introducing or spreading invasive species. Large areas of existing invasive plants may be removed if possible.	Existing invasive species would remain and spread on their own.
Cumulat	ive Impacts	Mitigation measures incorporated into project to address aesthetics, California tiger salamander and tree removal would reduce cumulative impacts to insignificant.	No impacts from this project

Table of Contents

Finding of N	No Significant Impact	V
Mitigated N	egative Declaration	vii
Summary		ix
Table of Co	ntents	X
List of Figur	res	xii
List of Table	es	xiii
List of Abbr	eviated Terms	xiv
Chapter '	1 Proposed Project	1
-	roduction	
	pose and Need	
1.2.1	Purpose	4
1.2.2	Need	4
1.3 Alt	ernatives	11
1.3.1	Build Alternative	11
1.3.2	No-Build Alternative	13
1.3.3 I	dentification of Preferred Alternative	13
1.3.4	Alternatives Considered but Eliminated from Further Discussion	17
1.4 Per	mits and Approvals Needed	19
	Affected Environment, Environmental Consequences, and Avoid	
-	n, and/or Mitigation Measures	
	man Environment	
2.1.1	Land Use	
2.1.2	Consistency with State, Regional, and Local Plans	
2.1.3	Growth	
2.1.4	Relocations and Real Property Acquisition	
2.1.5	Utilities/Emergency Services	
2.1.6	Traffic and Transportation/Pedestrian and Bicycle Facilities	
2.1.7	Visual/Aesthetics	
2.2 Ph	ysical Environment	36
2.2.1	Hydrology and Floodplain	
2.2.2	Water Quality and Storm Water Runoff	
2.2.3	Geology/Soils/Seismic/Topography	
2.2.4	Hazardous Waste or Materials	44
2.2.5	Air Quality	46
2.2.6	Noise	51
2.3 Bio	ological Environment	57
2.3.1	Natural Communities	57
2.3.2	Wetlands and Other Waters	59
2.3.3	Plant Species	63
2.3.4	Animal Species	65
2.3.5	Threatened and Endangered Species	69
2.3.6	Invasive Species	
	mulative Impacts	
2.5 Cli	mate Change under the California Environmental Quality Act	82

Table of Contents

Chapter 3	Comments and Coordination	97
Chapter 4	List of Preparers	102
Appendix A	California Environmental Quality Act Checklist	104
Appendix B	SHPO Concurrence Letter	113
Appendix C	Visual Simulations	115
Appendix D	Floodplain Maps	117
Appendix E	Mapping for Wetlands and Other Waters	121
Appendix F	Title VI Policy Statement	131
Appendix G	Minimization and/or Mitigation Summary	133
Appendix H	Comments and Responses	145
Appendix I	Opportunity for Noise Berm Letter to Property Owner	201
Appendix J	Biological Opinion Issued by U.S. Fish and Wildlife Service	203

List of Figures

Figure 1.1 Project vicinity	2
Figure 1.2 Project Location Map	
Figure 1.3 Level of Service for Two-Lane Highways	
Figure 1.4 Additional Criteria used to Measure Level of Service	
Figure 2.1 Proposed Noise Barrier (earthen berm)	
Figure 2.2 California Greenhouse Gas Inventory	
Figure 2.3 Fleet Carbon Dioxide (CO2) Emissions vs. Speed (Highway)	
Figure 2.4 Cascade of Uncertainties	
Figure 2.5 Outcome of Strategic Growth Plan	93
Figure D.1 Unnamed Creek at PM 13.0: Community #060331, Panel 0745F	
Figure D.2 Unnamed Creek at PM 15.4: Community #060331, Panel 0765F	118
Figure D.3 Santa Rosa Creek, Community #060831, Panel 0770F	
List of Tables	
S.1 Summary of Major Potential Impacts from Alternatives	X
Table 1.1 Existing Level of Service for Two-Lane Segment of Hwy. 246 Purisim	
Road – Domingos Road	8
Table 1.2 Predicted Level of Service for Hwy. 246 (Without Project) Purisima R	oad
– Domingos Road	
Table 1.3 Existing Level of Service for Intersections (2006)	9
Table 1.4 Future (2035) Level of Service for Intersections	
Table 1.5 Alternative Decision Matrix	15
Table 1.6 Required Permits	19
Table 2.1 Proposed Permanent Right-of-way Needs for the Project	
Table 2.2 Highway 246 No-Build and Predicted Level of Service	
Table 2.3 Future Intersection LOS	31
Table 2.4 Federal and State Attainment Status	48
Table 2.5 Estimated Construction Emissions (PM ₁₀) from Grading	50
Table 2.6 Noise Abatement Criteria Levels	
Table 2.7 Common Noise Activity Levels	53
Table 2.8 Proposed Noise Abatement	55
Table 2.9 Jurisdictional Areas within the Biological Study Area	61
Table 2.10 Plants found in the Project Limits that are on the California Invasive	Plant
Council's Invasive Plant Inventory	78
Table 2.11 Projects Considered for Cumulative Impacts	
Table 2.12 Analysis of CO and CO ₂ for SB-246 (3.75 mi.) with CTEMFAC V2.5	587
Table 2.13 Required Miles Per Gallon by Alternative	88
Table 2.14 Caltrans Statewide Efforts to Reduce Greenhouse Gas Emissions	95

List of Abbreviated Terms

California Department of Transportation
CEQA
California Environmental Quality Act

CRLF California red-legged frog
CTS California tiger salamander
ESA Environmentally Sensitive Area
FIRM Federal Insurance Rate Map
FHWA Federal Highway Administration

NPDES National Pollution Discharge Elimination System

NEPA National Environmental Policy Act

PM post mile

SWPPP Storm Water Pollution Prevention Plan
RWQCB Regional Water Quality Control Board
USFWS United States Fish and Wildlife Service
SHPO State Historic Preservation Officer
TMDL Total Maximum Daily Load

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) in cooperation with Santa Barbara County Association of Governments (SBCAG) proposes to make operational improvements along Highway 246 (also known as State Route 246) in northern Santa Barbara County. The project would add two sets (one lane in each direction) of passing lanes, one set at the western end of the project limits, the other set toward the eastern end, varying in length from 1.4 to 1.7 miles, and make intersection improvements at four locations. There would be a continuous left-turn lane constructed between Hapgood Road (west) and west of Campbell Road. The existing Class III bike lane would be maintained. These improvements would reduce conflicts and allow traffic to flow more smoothly. A minor amount of right-of-way would be purchased for the project's construction. The vicinity and location of the proposed work are shown in Figures 1.1 and 1.2.

The proposal is a joint project by Caltrans and the Federal Highway Administration and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under CEQA. The Federal Highway Administration's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable federal laws for this project is being carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327.

The SBCAG originally programmed the proposed project in the 2002 State Transportation Improvement Plan (STIP). It was also included in the Federal Transportation Improvement Plan for the project approval and environmental document phase. The project is programmed in the Regional Transportation Improvement Plan (RTIP) portion of the STIP for support costs, right-of-way capital, and preliminary engineering support. The construction capital and support costs will be funded by Santa Barbara County Measure A and Regional Improvement Program funds. The project is listed in the current financially constrained 2008 Regional Transportation Plan.

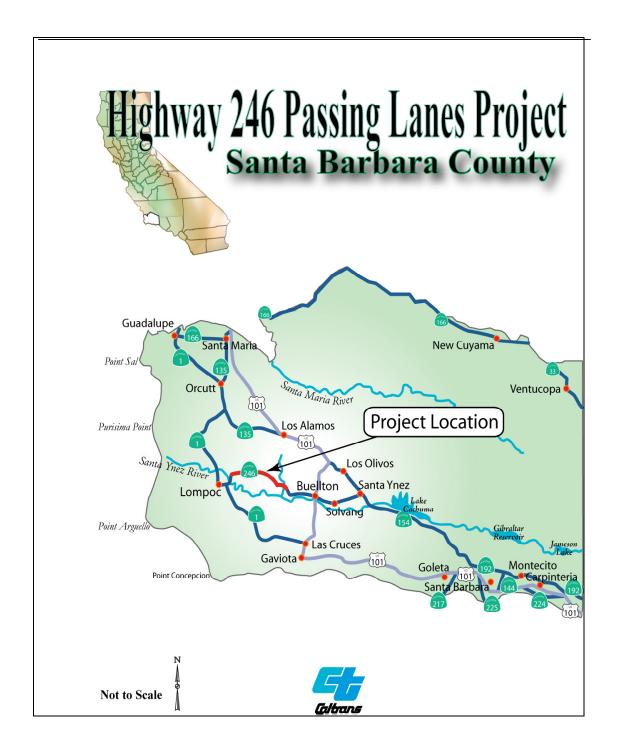


Figure 1.1 Project Vicinity



Figure 1.2 Project Location Map

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The 9-mile segment of Highway 246 addressed in this project is a two-lane conventional highway located on a slightly curved alignment in rolling terrain, with numerous intersections and private access points. East of the project limits, the highway widens to a four-lane expressway. The highway serves as a daily commuter route between the City of Lompoc and City of Buellton, as well as a primary link to the national highway network at U.S. Route 101. There are distinct peak periods during the morning and afternoon, 7 a.m. to 8 a.m. and 4 p.m. to 5 p.m. In addition to serving as a commuter route between Lompoc and Buellton and beyond, the highway serves as access to Vandenberg Air Force Base/Vandenberg Village, La Purisima Mission, La Purisima Golf Course and an increasing number of wineries/tasting rooms in the region. Highway 246 is used as an alternative route to Highway 1 when the roadway closes south of Lompoc due to flooding and/or landslides caused by winter storms.

PM 11.8

The posted speed limit along Highway 246 is 55 miles per hour. The 8-foot shoulder width is consistent through the project area. The rights-of-way range from roughly 100 to 300 feet wide. Santa Rosa Creek Bridge, at the easterly end of the project limits, is the only existing structure, other than culverts, along the 9-mile stretch. The highway currently allows passing in some areas, while other parts are striped for no passing in one or both directions.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is:

- To improve mainline operations by providing safer passing opportunities along Highway 246 between Cebada Canyon Road and Domingos Road.
- To improve sight distance (the visibility of the road ahead) and reduce the length of the approaching uphill grade near the intersection of Tularosa Road/Highway 246.
- To improve traffic flow and reduce conflicts at several intersections, including Tularosa Road, Hapgood Road (east and west) Santa Rita Road, Campbell Road, and Drum Canyon/Mail Road.

1.2.2 Need

Passing Opportunities

The primary land use along the highway between Buellton and Lompoc is agriculture. Farm equipment (tractors, plows, etc.) uses the highway to access the fields from isolated driveways. Slow farm equipment and larger vehicles delivering freight to Vandenberg Air Force Base can result in a line of vehicles stuck behind slow traffic. The vehicle backups are exacerbated at Tularosa Road where heavy trucks and farm vehicles are slowed by the steep approach grades.

Currently, several locations along this highway segment are striped to allow passing when conditions permit. During periods of peak use, oncoming traffic makes conditions unsafe for passing much of the time. A separate project, known as the soft median barrier project, is scheduled for construction in July 2010. Soft median barrier projects have proven to be very effective at preventing cross-centerline collisions. This project will consist of a set of double-yellow lines bounding a rumble strip, making passing illegal. The soft median barrier project will occur between post miles 9.5 and R21.0, which affects the entire limits of the Passing Lanes Project. Passing opportunities within the project limits will be reduced from what is currently allowed. The reduced passing opportunities will continue until the proposed passing lane project is constructed.

Passing opportunities are needed to address the long lines of traffic that back up behind trucks and farm equipment. While farm equipment may typically travel during off-peak hours, trucks use the highway throughout the day. Truck traffic accounts for 8.5 percent of the average daily traffic and 6 percent of the peak-hour volumes on Highway 246.

Currently, there is a vertical crest west of the intersection at Tularosa Road, which makes it difficult for vehicles attempting to make right or left turns off of Tularosa Road because they don't have a clear view of approaching traffic on Highway 246. Residents who live off of Tularosa Road confirmed this was a problem during a Public Scoping Meeting held for this project in July 2008.

A Traffic Operations Analysis – Level of Service Report was prepared in April 2009 and updated in March 2010. The report contains information for the 9-mile stretch of Highway 246, from 0.3 mile west of Purisima Road to 0.3 mile east of Domingos Road. The existing highway is a two-lane facility with partial access control. The highway serves as a main commuter route and a primary connector between the City of Lompoc and City of Buellton. In addition to serving as a commuter route between Lompoc and Buellton and beyond, the highway serves as access to Vandenberg Air Force Base/Vandenberg Village, La Purisima Mission, La Purisima Golf Course and an increasing number of wineries/tasting rooms in the region. Within the project limits, the existing average daily traffic volumes are approximately 9,700 vehicles. The average daily traffic volumes are projected to increase to 25,100 vehicles in the year 2035. There are distinct peak periods during the morning and afternoon, from 7 a.m. to 8 a.m. and 4 p.m. to 5 p.m.

Level of Service

A level of service score designates the quality of traffic flow on a particular roadway. Level of service reflects the effect that speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort, convenience and operating costs have on driving conditions. Level of service is expressed as a range of traffic flow, designated A through F. Level A represents free-flowing traffic conditions; level of service E represents very congested traffic flow. At level of service F, traffic volume exceeds the capacity of the roadway and traffic flow is stop-and-go. Figure 1.3 defines levels of service for two-lane highways similar to Highway 246. In addition to measuring the speed along the highway, another way to evaluate effectiveness is to look at "percent time spent following," a measure of the average percent of total

travel time that vehicles must travel in platoons or packs behind slower vehicles on a two-lane highway because they cannot pass.

The two-lane highway segment east of Purisima Road to Domingos Road is currently operating at level of service D during both the morning and evening traffic peaks (refer to Table 1.1). The majority of the traffic is traveling in the eastbound direction heading towards Buellton in the morning. The commute is reversed in the afternoon with higher volumes in the westbound direction heading to Lompoc. Existing traffic volumes between Purisima Road and Domingos Road are 890 vehicles per hour during the morning (7 a.m.–8 a.m.) peak hour and 920 vehicles per hour during the evening (4 p.m.–5 p.m.) peak hour. The SBCAG travel forecast model estimates the two-lane highway segment of Highway 246 will experience an average annual growth of more than 3.5 percent per year. Based on this calculation, without the project, the facility would operate at level of service E during the peak traffic hours in 2035. The target level of service for this corridor is C.

Figure 1.3 Level of Service for Two-Lane Highways

LEVELS OF SERVICE

for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. No delays
В		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. No delays
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. Minimal delays
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. Minimal delays
E		30	Unstable traffic flow. Speeds change quickly and maneuverability is low. Significant delays
F	Todoo Todoo		Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. Considerable delays

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

Figure 1.4 Additional Criteria used to Measure Level of Service

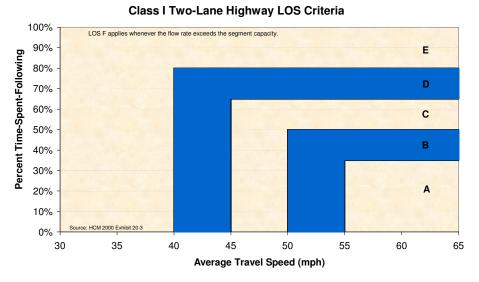


Figure 1.4 illustrates the level of service (LOS) criteria for Class 1 (two-lane highways). A segment of a Class 1 highway must meet the criteria for both the percent time-spent following and the average travel speed shown in Figure 1.4 to be classified in any particular LOS. For example, a Class 1 two-lane highway with percent time-spent following equal to 45 percent and an average travel speed of 40 miles/hour would be classified as LOS D.

Traffic studies performed on this highway segment show that vehicles travel behind slower-moving traffic nearly 70 percent of the time during the morning peak hour and about 68 percent of the time during the evening peak hour (refer to Table 1.1). By 2035, without the project, the percent time spent following will increase to over 80 percent in the morning peak hour and close to 90 percent during the evening peak hour (refer to Table 1.2). Continuing urban growth in Lompoc and surrounding residential areas was linked to the need for upgrading the connection to U.S. Route 101.

Table 1.1 Existing Level of Service for Two-Lane Segment of Hwy. 246 Purisima Road – Domingos Road

Peak	hour	Year	Time spent following (%)	Average travel speed (mph)	Level of service
Mor	ning	2006	69.6	63.9	D
Eve	ning	2006	67.9	64.2	D

Note: LOS shown applies to the peak direction of travel, AM Eastbound and PM Westbound

Table 1.2 Predicted Level of Service for Hwy. 246 (Without Project)
Purisima Road – Domingos Road

Peak hour	Year	Time spent following (%)	Average travel speed (mph)	Level of service
Morning	2015	74.7	62.2	D
Evening	2015	79.4	60.4	D
Morning	2035	83.3	58.7	E
Evening	2035	87.3	56.2	E

Note: LOS shown applies to the peak direction of travel, AM Eastbound and PM Westbound

Intersections

Both Purisima Road and Cebada Canyon Road intersections have existing left-turn pockets, whereas the intersections at Tularosa Road, Campbell Road, and Drum Canyon Road/Mail Road do not. All of the intersections are controlled by two-way stop signs on the intersecting road and currently operate at level of service C or better as indicated below in Table 1.3.

Table 1.3 Existing Level of Service for Intersections (2006)

Intersection with Highway 246	Traffic Direction	Morning Peak		Evening Peak	
		Delay (seconds)	Level of Service	Delay (seconds)	Level of Service
Purisima Rd	Southbound	17.3	С	13.1	В
	Eastbound	7.6	Α	8.2	Α
	Westbound	0.0	Α	0.0	Α
Cebada Canyon	Southbound	12.5	В	14.3	В
Rd	Eastbound	7.8	Α	9.1	Α
	Westbound	0.0	Α	0.0	Α
Tularosa Rd	Southbound	12.8	В	15.3	С
	Eastbound	0.1	Α	9.1	Α
	Westbound	0.0	Α	0.0	Α
Drum Canyon Rd	Northbound	16.5	С	15.3	С
	Southbound	17.9	С	22.9	С
	Eastbound	0.1	Α	0.0	Α
	Westbound	0.3	Α	0.0	Α

Without any improvements, the operations of all the intersections are anticipated to deteriorate as traffic volumes increase, which they are predicted to do. The Purisima Road intersection with Highway 246 was projected to operate at levels of service F and D in 2035 during the morning and evening peak hours, respectively. The intersection with Purisima Road has now been identified as a safety project and will be addressed separately. The Cebada Canyon Road intersection is projected to operate at level of service C or better during the morning peak hour but at level of service D during the evening peak hour, in 2035. The same year, operations would be acceptable at Tularosa Road and the highway during the morning peak hour with a predicted level of service C, but would be level of service D during the evening peak hour. The Drum Canyon Road/Mail Road intersection is projected to operate at level of service F during both morning and evening peak hours.

Table 1.4 shows the predicted levels of service at the intersections in 2035. It should be noted that the intersections are all identified and were studied as two-way stop control, although most roads end up at Highway 246 as a "T" intersection (with a stop sign at the side street only).

Table 1.4 Future (2035) Level of Service for Intersections

Intersection with Highway 246	Traffic Direction	Morning Peak		Evening Peak	
		Delay (seconds)	Level of Service	Delay (seconds)	Level of Service
Purisima Rd	Southbound	>50.0	F	33.3	D
Existing	Eastbound	7.8	Α	9.5	Α
configuration	Westbound	0.0	Α	0.0	Α
Purisima Rd	Southbound	9.5	Α	14.3	В
Roundabout	Eastbound	19.3	В	3.0	Α
configuration	Westbound	4.5	Α	4.3	Α
Cebada Canyon	Southbound	30.4	D	36.1	E
Rd	Eastbound	8.3	Α	13.0	В
	Westbound	0.0	Α	0.0	Α
Tularosa Rd	Southbound	25.0	С	>50.0	F
	Eastbound	0.3	Α	0.6	Α
	Westbound	0.0	Α	0.0	Α
Drum Canyon	Northbound	>50.0	F	>50.0	F
Rd/Mail Rd	Southbound	>50.0	F	>50.0	F
	Eastbound	0.2	Α	0.2	Α
	Westbound	0.7	Α	2.1	Α

In addition to looking at level of service standards, it is important to note that the high speeds in the corridor create situations where a left-turn pocket and/or safe refuge would assist drivers when making left turns. Currently, motorists who wish to turn left must slow and stop in the through lane, which increases the likelihood of rear end-type accidents. In addition to reducing turning conflicts, the turn lanes also provide an operational benefit. By separating the through traffic from vehicles turning at intersections, there's less disruption to the traffic flow on the mainline and the speed in the traffic stream is better maintained, resulting in better level of service on the mainline.

1.3 Alternatives

The purpose of the project is to improve mainline operations by providing safer passing opportunities along Highway 246 between Cebada Canyon Road and Domingos Road. In addition, the local partners have expressed a desire for safer turning opportunities and improving bicycle safety. A scoping process was conducted in 2001 where several alternatives were evaluated as part of the Project Study Report (September 2001). Following several years of delay due to funding constraints, the alternatives were reevaluated to determine the appropriate project study limits and determine the project features that would best meet the purpose and need. Alternatives were measured against two criteria: achieving the purpose and need with as little new right-of-way as possible and minimizing impacts to the environment as much as possible. The team acknowledged that there were potential impacts due to existing resources in the project area. Two alternatives are being carried forward, a Build Alternative and a No-Build Alternative.

1.3.1 Build Alternative

The Build Alternative carried forward from the 2001 Project Study Report was identified in that report as Alternative 2. Improvements to the intersection of Purisima Road and Highway 246 (at the western project limits) were part of this alternative, but in 2008, the intersection's high accident rating made it eligible for a separate safety project. Although the project limits have not been modified, the proposed Build Alternative for the passing lane project would not include improvements at the intersection of Purisima Road and Highway 246. Work would begin slightly west of Cebada Canyon Road.

The project would create two sets (one lane in each direction) of passing lanes, one set at the western end of the project limits, the other set toward the eastern end, varying in length from 1.4 to 1.7 miles. On the western end of the project, a 1.5-milelong passing lane would extend eastbound from Cebada Canyon Road to Tularosa Road. In the same vicinity in the westbound direction, a 1.7-mile-long passing lane would extend from Hapgood Road to Tularosa Road. On the eastern end of the project, a set of passing lanes would extend in each direction from Santa Rita Road to just east of Campbell Road. The project would also construct intersection improvements consisting of left-turn pockets at Tularosa Road, Hapgood Road (west), Campbell Road, and Drum Canyon Road/Mail Road. A 4-foot soft median barrier will be constructed throughout the project limits with breaks for public road connections to allow left-turn channelization. To accommodate the left-turn pocket at Drum Canyon/Mail Road, the Santa Rosa Creek Bridge would have to be widened by 12 feet. At Tularosa Road, the highway would be realigned to the south and the profile lowered, reducing uphill grades and increasing sight distance. There would be a two-way continuous left-turn lane extending west from Hapgood Road to 3,800 feet west of Campbell Road. The existing Class III bike route (a bike route designated by signs or permanent markings and is shared with pedestrians or motorists) would be maintained within the project limits. Ten maintenance vehicle pullouts would be installed in appropriate locations, which will be determined in consultation with the Landscape Architecture and Maintenance units during the project's design phase.

The Build Alternative includes extending or replacing 57 culverts through the entire length of the project limits. A 68-foot-long viaduct would be constructed to support the road at Campbell Pond. A series of 18 undercrossings would be spaced 150 feet apart. Specific details beyond their spacing have not yet been determined for the undercrossings. Culverts could be circular, boxed, or have other design features. An earthen berm was proposed as a barrier to attenuate noise for one residence in the vicinity of Hapgood Road. The barrier was offered to the property owner, but refused (refer to Appendix I).

The current estimate for project construction and right-of-way costs is approximately \$40 million. This is reduced from the original estimate of \$49 million that was included in the draft environmental document.

1.3.2 No-Build Alternative

The No-Build Alternative proposes that no project be constructed at this time. The lack of passing opportunities and resulting backup behind slow-moving vehicles would continue. Intersection operations within the 9-mile stretch of highway would continue to deteriorate further. No changes would be made to the uphill section near Tularosa Road, and motorists would continue to have limited sight distance at that intersection. There would be no widening along the 9-mile stretch of highway, including the section in the vicinity of Campbell Pond. As a result, there would be no additional impacts to the California tiger salamander population or habitat. The undercrossing/viaduct structures would not be needed.

1.3.3 Identification of Preferred Alternative

After comparing and weighing the benefits and impacts of all of the feasible alternatives, Caltrans identified the Build Alternative as the preferred alternative. The matrix shown in Table 1.6 provides an overview of the preferred alternative (Build Alternative), previously identified as 2A, and the various design options, which were identified as 2B-2F. This matrix was used as a decision-making tool. The alternative that was selected combined the two sets of passing lanes and left-turn pockets because it would best meet the purpose and need of the project.

The rationale for selecting the Build Alternative is as follows: 1) dual passing lanes would provide safer passing opportunities within the corridor, thereby improving operations and improving level of service; 2) sight distance would be improved as a result of lowering the profile grade and reconfiguring the highway near Tularosa Road; 3) left-turn pockets would make it easier and safer for residents to turn from and onto Highway 246, thereby reducing potential conflicts at locations such as Tularosa Road. These improvements would improve operations, while minimizing environmental impacts as much as possible within the project limits.

Table 1.5 Alternative Decision Matrix

Improvements Included in Build Alternative

(*Note: No longer part of this project)

All elements under the above line are part of the proposed Build Alternative

					ı			1			1	1		140.1	0
	Purisima Road Inter- section (PM 12.26) Now a separate safety project	Cebada Canyon Road (PM 12.46) (Left- Turn Channel- ization/ Refuge Area)	Western Set of Passing Lanes (1.4 miles long in each direction)	Channelization /Merging Lane)	Road Profile Correction	Hapgood Road Intersection (PM R16.19) Left-Turn Channelization	Two-Way Left-Turn Lane between Hapgood Road and Big Ranch Road	Santa Rita Road Intersection (PM R17.10)	Big Ranch Road Intersection (PM R17.39) Left-Turn Channelization	Eastern Set of Passing Lanes (1.4 miles long in each direction)	Campbell Road Intersection (PM R18.17) Left-Turn Channelization	Drum Canyon Road/Mail Road Intersection (PM R20.18) Left-Turn Channelization	Construct 4-Lane Divided Expressway From Station 483+50 to Existing 4-Lane Expressway	Widening of Santa Rosa Creek Bridge Br. # 51-0139 (PM R20.22)	Cost in thousands (including right-of-way)
ALT 2A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	\$40,000
ALT 2B	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	\$32,390
ALT 2C	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	\$37,745
ALT 2D	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	\$44,493
ALT 2E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	\$41,084
ALT 2F	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	\$48,500

Description of Alternatives:

Alt 2A: Construct all Improvements in Alternative 2 of the Project Study Report with updated requirements for passing lane and two-way left-turn lane. All passing lanes are at least 1.4 miles long. (See below for a list of alternatives in the Project Study Report)

Alt 2B: Construct intersection improvements at Purisima Road and western set of passing lanes including left-turn channelization at Hapgood Road.

Alt 2C: Construct intersection improvements at Purisima Road, western set of passing lanes, and two-way left-turn lane from Hapgood Road to Big Ranch Road.

Alt 2D: Construct intersection improvements at Purisima Road, western and eastern sets of passing lanes, and two-way left-turn lane from Hapgood Road to Big Ranch Road.

Alt 2E: Construct intersection improvements at Purisima Road, western set of passing lanes, two-way left-turn lane from Hapgood Road to Big Ranch Road, and intersection improvements at Drum Canyon Road/Mail Road with widening of Bridge at Santa Rosa Creek.

Alt 2f: Construct intersection improvements at Purisima Road, western set of passing lanes, two-way left-turn lane from Hapgood Road to Big Ranch Road, and extend 4-lane expressway west from existing termination to Sta 483+50 just east of the expanded Campbell Pond.

The alternatives were determined by assuming the project core to be the improvements at Purisima Road and the western set of passing lanes. Then other improvements along the corridor were added to help determine the cost vs. benefit of the improvement. The improvements were added in its assumed order of need and benefit.

1.3.4 Alternatives Considered but Eliminated from Further Discussion

When the Project Study Report was prepared in 2001, three build alternatives and a No-Build Alternative were considered. The project development process was stopped and started several times. The project was reinitiated in 2006 and moved forward to the draft environmental document/draft project report stage we are in now. The project development team considered the following options but, in the end, the team decided to carry forward the build alternative that combined the two sets of passing lanes and proposed intersection improvements, identified as Alternative 2A in Table 1.5.

Four-Lane Widening

The proposed project was originally entitled the Highway 246 Widening Project, but the name was changed when the four-lane alternative was eliminated from consideration. The four-lane widening project was not pursued because the Caltrans Traffic Operations branch completed studies that showed the 20-year traffic projections could not justify making this stretch of Highway 246 four lanes wide from beginning to end. The improvements would go beyond what is necessary to meet the purpose and need, and studies showed that a full widening of the 9-mile stretch would require a large amount of right-of-way acquisition and result in potentially significant environmental impacts to farmland, wetlands, riparian areas, and endangered species (the California tiger salamander and California red-legged frog).

Alternatives 2B-2E

These were considered to be "variations" of the selected build alternative identified as 2A. These variations are shown in Table 1.5. These alternatives were created with the idea of constructing selected improvements to maximize funding resources. Although these project alternatives did not meet the purpose and need when evaluated individually, it was noted that if funding became an issue, the project could potentially be constructed in phases. Each is described briefly below:

Alternative 2B

This alternative proposed to construct intersection improvements at Purisima Road and left-turn pockets at Hapgood Road. The western set of passing lanes would be constructed between Cebada Canyon Road and east of Tularosa Road. Improvements would include the profile changes at Tularosa Road. This alternative was not selected because it did not address the passing limitations on the eastern segment of the

highway and did not improve several intersections with Highway 246, for example at Hapgood, Road, Santa Rita Road, Campbell Road and Drum Canyon/Mail Road.

Alternative 2C

This alternative proposed to construct intersection improvements at Purisima Road and a two-way left-turn lane from Hapgood Road to just east of Campbell Road. A western set of passing lanes would be constructed between Cebada Canyon Road and east of Tularosa Road. This alternative was not selected because it did not address passing limitations on the eastern segment of the highway and did not improve several intersections including Campbell Road and Drum Canyon Road/Mail Road.

Alternative 2D

This alternative proposed to construct intersection improvements at Purisima Road and the two-way left-turn lane from Hapgood Road to east of Campbell Road. Both a western and eastern set of passing lanes would be constructed. This alternative would include most of the improvements covered by the proposed build alternative with the exception of improvements at Drum Canyon Road/Mail Road. This alternative was not selected because the team wanted to address residents' concerns at the Drum Canyon/Mail Road intersection.

Alternative 2E

This alternative proposed to construct intersection improvements at Purisima Road and include a two-way left-turn lane from Hapgood Road to east of Campbell Road. A western set of passing lanes would be constructed from Cebada Canyon to east of Tularosa Road. Left-turn pockets would be installed at Drum Canyon Road/Mail Road. This alternative was not selected because it would not address the limited passing opportunities on the eastern stretch of the project.

Alternative 2F

This alternative was evaluated after the U.S. Fish and Wildlife Service asked Caltrans to look at ways to avoid or minimize impacts to the Campbell Pond area, a known California tiger salamander breeding pond. The team tried to move the easternmost passing lanes in order to avoid the Campbell Pond area altogether. However, strict design criteria (i.e., required lengths, distance between passing lanes, topography, etc.) for relocating the passing lanes made it infeasible to move the eastern passing lanes outside of the Campbell Pond area. Therefore, the team looked at extending the four-lane expressway in a westward direction instead of constructing the easternmost set of passing lanes. After further review by the Traffic Operations branch, it was

determined that costs would escalate once the construction of a second bridge over Santa Rosa Creek was added into the project. The team determined that this alternative would not be viable and came up with the amphibian-crossing structures as a way to mitigate for the project's impacts and satisfy the two agencies overseeing the affected endangered species.

1.4 Permits and Approvals Needed

Table 1.6 below lists the permits to be required prior to project construction:

Table 1.6 Required Permits

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers (ACOE)	Section 404 Permit	Application pending detailed design information.
Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application pending detailed design information.
California Department of Fish and Game (CDFG)	1602 Streambed Alternation Agreement	Application pending detailed design information.
California Department of Fish and Game (CDFG)	Consistency Determination under Section 2080.1 of the CDFG Code for the "may affect, likely to adversely affect" determination made for California tiger salamander (a state listed threatened species as of March 3, 2010).	To be completed prior to final design.
U.S. Fish and Wildlife Service	Section 7 Endangered Species Consultation	Formal consultation has been completed. Biological Opinion received on March 12, 2010 (see Appendix J).

Chapter 2

Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project, potential impacts from each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures. Any indirect impacts are included in the general impacts analysis and discussions that follow. As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

- Coastal Zone Management Act or Coastal Zone Protection Act—The project study area lies outside the coastal zone.
- Environmental Justice—Large agricultural parcels as well as rural estate properties with ranch-style homes surround the proposed project limits. Although there are minority and low-income populations within a few miles of the project, in nearby Lompoc, there are no populations that meet the definition of minority and/or low-income populations within the project limits. Therefore, the proposed project is not expected to decrease safety, isolate a community, or affect any minority and/or low-income populations.
- Community Impacts—Land use adjacent to the project area is agricultural; the closest communities are several miles away. Ranches and farms extend along the highway with some homes scattered about. The Tularosa Road residential area contains estate-sized homes on larger parcels. The residences within certain distances from the highway were considered for noise abatement (refer to Section 2.2.6).
- Farmland/Timberland—Although farmland is present on either side of Highway 246, the project would not permanently impact prime or unique farmland. The project would require the permanent acquisition of 1.09 acres in the area located south of Tularosa Road. The 1.09-acre area is not classified as farmland soils as

defined by the Natural Resource Conservation Service. The property is used for grazing and is currently under a Williamson Act contract. The contract would need to be cancelled and reinitiated to reflect the new parcel and size.

- Cultural Resources—Caltrans prepared a Historic Property Survey Report and supporting technical documents in December 2008 and transmitted them to the State Historic Preservation Officer on December 16, 2008. A letter of concurrence dated February 9, 2009 by the State Historic Preservation Officer is included in Appendix B. The proposed project would not affect cultural resources.
- Energy—Caltrans incorporates energy efficiency, conservation, and climate change measures into transportation planning, project development, design, operations, and maintenance of transportation facilities, fleets, buildings, and equipment to minimize use of fuel supplies and energy sources and reduce greenhouse gas emissions (see Section 3.2.4 Climate Change Under the California Environmental Quality Act). When balancing energy used during construction and operation against energy saved by relieving congestion and other transportation efficiencies, the project would not have substantial energy impacts.
- Paleontology—The highway and surrounding areas are located on formations described in the Paleontology Sensitivity Mapping Project as having a low potential for containing sensitive fossils (Paleontology Identification Report, November 2008).
- Wild and Scenic Rivers—There are no designated Wild and Scenic Rivers in the project limits.

2.1 Human Environment

2.1.1 Land Use

This section describes the current and planned land use within the proposed project area. Land use planning within the project limits is a function of Santa Barbara County. The project area lies outside the jurisdiction of the City of Lompoc. However, as the nearest community to the project, the City of Lompoc has a high interest in the project.

Affected Environment

The approximately 9-mile-long section of highway runs through a mostly rural landscape consisting of agricultural crops and cattle grazing along with scattered

Chapter 2 • Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

residences and ranch houses. Agriculture is the prevailing land use and includes livestock grazing, dry farming, irrigated row crops, and vineyards. A private golf course known as La Purisima is located north of the highway, east of Cebada Canyon Road. The community of Lompoc lies several miles west of the project limits and La Purisima State Park, which includes a historic mission, is located approximately 1 mile northwest of the project limits.

Located just 5 miles from the project site, Vandenberg Air Force Base dominates the area's economy by directly employing a large percentage of Lompoc's residents, and contributing \$1.7 billion to the regional economy. Other mainstays of the economy include the federal correctional institution located near Lompoc, two diatomaceous earth mines, and agriculture (especially seed flowers and vegetables).

The Santa Barbara County Comprehensive Plan (adopted in 1980 and revised August 1982 through October 1992) contains planning goals for the different planning areas, including the Lompoc Valley. The planning goals for the Lompoc Valley emphasize the unique character of this rural valley and place great importance on preserving agricultural land and scenic vistas.

Land use in the Lompoc Valley is not expected to change over the near future. Longrange planning efforts will continue to restrict urbanization to the City of Lompoc and designated urban portions of the Vandenberg Village/Mission Hills/Mesa Oaks area. Agriculture will continue to be the dominant land use with the occasional agriculturally related commercial venture such as a winery with tasting rooms. Residential development will be limited to the density allowed on agriculturally zoned properties unless specific plans are approved to allow future subdivisions. Additional commercial development or higher density residential development, versus what is currently allowed would need to be found consistent with the existing general plan/zoning. Amendments could be considered for the future.

Environmental Consequences

The existing state right-of-way is wide enough to accommodate the majority of the proposed project features, thereby requiring only a small amount of new right-of-way to improve operations along the highway. The project would not permanently affect any prime or unique farmland and has been designed to protect the rural scenic qualities of the project area as much as possible (refer to Section 2.1.6 for further discussion).

Avoidance, Minimization, and/or Mitigation Measures

None are required.

2.1.2 Consistency with State, Regional, and Local Plans

Affected Environment

Regional Transportation Plan for Santa Barbara County

The 2008 Regional Transportation Plan outlines the region's goals and policies for meeting current and future transportation needs and provides a foundation for making transportation decisions. Noted in Section 4.3.2 of the North County segment of the above plan: *Increased capacity with new passing lanes on SR 246 between Buellton and Lompoc is necessary to eliminate automobile conflicts with agricultural operations and accommodates forecast growth.* The project, as proposed, has been incorporated into the regional planning document. The project has been designed to meet the stated purpose of improving traffic flow, but not build for growth beyond the 20-year forecast for the region.

Santa Barbara County Comprehensive Plan

The Santa Barbara County Comprehensive Plan provides goals, objectives, policies, programs and standards for the various planning areas within the county. The Lompoc Planning Area specifically addresses the project area and provides guidance on growth, land use, circulation, recreation and the environment. The Tularosa Road Area Planning Policy applies restrictions, for example, limiting density, specific to the residential development along this road immediately north of the project. The County Comprehensive Plan includes the following policies that apply to the proposed project:

- Santa Barbara County Land Use Element, Lompoc Area Circulation Section states that improvements to or alternations of existing roadways must minimize environmental and visual impact. The scenic enhancement of through-transit corridors in the Lompoc Valley should be encouraged. The proposed project with added minimization measures is consistent with this policy. Measures include containment of the footprint to the absolute minimum necessary to be compatible with the natural landform as well as following the natural contours of the landscape.
- Santa Barbara County Land Use Element, Visual Resource policy states that in areas designated as rural on the land use plan maps, the height, scale, and design

of structures would be compatible with the character of the surrounding natural environment except where technical requirements dictate otherwise. The proposed project is located in a rural area of the county with strong visual character. The project development team considered these qualities when evaluating options for improving the corridor. Great care has gone into ensuring that the project blends in with the existing environment. Refer to Section 2.1.6 for more details related to visual resources.

Santa Barbara County Environmental Thresholds and Guidelines Manual specify significant visual resources within the county that have aesthetic value. The proposed project is located in areas that include views of streams, watersheds and mountains along with scenic areas. These elements have been considered during the project planning phases. Refer to Section 2.1.6 for more details related to visual resources.

Environmental Consequences

The proposed project with the added minimization measures to offset visual concerns is consistent with the policies noted above. The project development team has been sensitive to these policies and has maintained the goal of reducing the project footprint to the minimum size necessary to meet the purpose and need.

Avoidance, Minimization, and/or Mitigation Measures

The minimization measures listed in Section 2.1.6 are intended to address any potential impacts to the visual character of the highway. These measures would ensure the project is consistent with the Santa Barbara County Comprehensive Plan.

2.1.3 **Growth**

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 Code of Federal Regulations 1508.8, refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act also requires the analysis of a project's potential to induce growth. California Environmental Quality Act guidelines, Section

15126.2(d), require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

Affected Environment

Population

The Lompoc Valley area is estimated to have an existing population of close to 61,300. The population total is split between the City of Lompoc, which has 43,300 people and the unincorporated area, which has 18,000 people. The unincorporated area includes Vandenberg Village, Mesa Oaks, Mission Hills, and scattered ranches and homes along the Highway 246 corridor, including within the project area. The population is projected to increase 14 percent between now and 2040 (The Santa Barbara County Association of Governments' Regional Growth Forecast 2005-2040 dated August 2007).

The City of Lompoc continues to look for opportunities to expand tourism and attract related business. The city government also encourages well-planned development, both residential and commercial. The City has submitted several applications for annexation of nearby land. Areas in the vicinity of Vandenberg Village and Mission Hills continue to develop at a modest rate. A list containing some of the proposed projects in close proximity to the project limits is found in Table 2.9, under the cumulative impact section. This list does not contain all of the projects in the Lompoc Valley. There are a number of pending projects located closer to Vandenberg and within the City of Lompoc. These areas serve people who work at Vandenberg Air Force Base and the nearby prison, but they have also become bedroom communities for people who commute to Santa Barbara.

Environmental Consequences

The proposed project would not directly generate any additional population or housing. The project would accommodate existing and planned future growth and is identified in regional planning documents and the County area plan. Proponents of added development in the City of Lompoc and surrounding areas support improvements to Highway 246 because it would facilitate efficient and safer travel. Although the passing lanes would add capacity, the project would not create additional access points (for example, adding an interchange) nor would it add lanes for the entire length of the project.

Avoidance, Minimization, and/or Mitigation Measures

None are required.

2.1.4 Relocations and Real Property Acquisition

Caltrans' Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and Title 49 Code of Federal Regulations, Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 United States Code 2000d, et seq.). Please see Appendix F for a copy of Caltrans' Title VI policy statement.

Affected Environment

The information in this section is based on the project Right of Way Data Sheet, which was prepared June 23, 2009.

The majority of the properties in and around the project limits contain agricultural uses. There are relatively few improvements in close proximity to the highway.

Environmental Consequences

No relocation of residences or businesses is required for this project. However, the project would require one permanent right-of-way acquisition for the purposes of realigning Highway 246 at Tularosa Road as shown in Table 2.1.

Table 2.1 Proposed Permanent Right-of-Way Needs for the Project

Overall parcel size	Partial acquisition amount	Existing use	Zoning
312.96 acres	1.09 acres	Pasture/grazing	Agricultural

Avoidance, Minimization, and/or Mitigation Measures

The property owner would be compensated for the market value of the partial property acquisition.

2.1.5 Utilities/Emergency Services

Affected Environment

The Central Coast Water Authority water line follows the alignment over a stretch of Highway 246 and then crosses the highway in several locations. This water line was constructed in the mid-1990s as part of the expansion of the state water project. The water is intended for irrigation, and encroachment permits were required for the locations where it crosses the highway. There are power poles located on the north side of the highway that are owned by Pacific Gas and Electric, and telephone utility poles located south of the highway. Both of these utilities lie on the outside edge of the right-of-way. Other than where the water line crosses the highway, there are no points of conflict within the project limits.

Environmental Consequences

No impacts to the water line are currently anticipated. If concerns arise during the design phase, Caltrans would work with the Central Coast Water Authority to ensure necessary access and protection of the water line. The Right of Way Data Sheet (June 23, 2009) estimates there will be 16 pole relocations in the vicinity of the realignment at Tularosa Road.

Avoidance, Minimization, and/or Mitigation Measures

None are anticipated. If any conflicts arise during the design process, ongoing coordination between Caltrans and the affected utility companies would ensure a smooth process.

2.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

Caltrans, as assigned by Federal Highway Administration, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a

potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public would be provided to persons with disabilities.

Affected Environment

According to the Traffic Operations Analysis – Level of Service Report (April 2009 and revised March 2010), the existing average daily traffic within the project limits is estimated to be 9,700 vehicles. The growth of the average daily traffic count is projected to be about 3.5 percent annually between 2006 and 2035. Therefore, the average daily traffic count is projected to increase to 25,100 vehicles by 2035.

Bicyclists frequently use the highway because of the overall flat terrain and high scenic quality. There is an existing 8-foot-wide paved shoulder, which is an important element for bicyclists. The shoulder width would remain a minimum of 8 feet wide when the project is completed. In areas where guardrail is proposed, the shoulder would be 10 feet wide. Pedestrians do not use the highway except in emergency situations. Because of the rural nature of the area and the relatively few residences located immediately adjacent to the highway, there are no sidewalks along the project limits and none are planned.

Both the Purisima Road and Cebada Canyon Road intersections have an existing left-turn pocket, whereas the intersections at Tularosa Road, Hapgood Road (east and west) and Drum Canyon Road/Mail Road do not. Traffic volumes on Cebada Canyon, Tularosa Road, Hapgood Road (east and west) and Drum Canyon Road/Mail Road are not very high since these locations primarily provide access to private residential homes and farms versus major connectors such as Purisima Road.

Environmental Consequences

The project's overall impact on traffic operations would be to increase passing opportunities for drivers who are following slower vehicles, and to make it easier for drivers to make left turns from Highway 246 onto Cebada Canyon Road, Tularosa Road, Hapgood Road (east and west), and Drum Canyon Road/Mail Road. The proposed project would improve the traffic flow and help operations on the Highway 246 corridor within the project limits. As discussed in Section 1.2.2, the two-lane highway segment east of Purisima Road to Domingos Road is currently operating at

level of service D during the morning and evening traffic peaks. The completed project would improve the level of service to C for both morning and evening peak hours in the years 2015, the construction year, and 2035, 20 years after construction, which is defined as the design year, as shown in Table 2.2, which is below. The table also shows the project would lower the percent time spent following, which increases the average travel speed.

Table 2.2 Highway 246 No-Build and Predicted Level of Service

Project Scenarios	Peak hour	Year	Time spent following (%)	Average travel speed (miles per hour)	Level of service
No-build	Morning	2015	77.4	61.5	D
No-build	Evening	2015	81.4	59.9	E
No-build	Morning	2035	83.3	58.7	E
No-build	Evening	2035	87.3	56.2	E
Two sets of passing lanes	Morning	2015	58.0	64.9	С
Two sets of passing lanes	Evening	2015	62.1	63.3	С
Two sets of passing lanes	Morning	2035	63.2	62.8	С
Two sets of passing lanes	Evening	2035	64.9	60.2	С

Notes: 1) LOS shown applies to the peak direction of travel, AM eastbound and PM westbound 2) Predicted numbers changed slightly when factoring in the soft median barrier project proposed for construction in July 2010

Adding left-turn pockets for the various intersections would benefit the residents who live off these roads along with people who need access to some of the businesses. Of these intersections, only Drum Canyon/Mail Road southbound approach is predicted to operate at a level of service D with the project in 2035 (refer to Table 2.3). The other intersections would improve to a level of service C. With the high traffic volumes along this stretch of highway, there is a positive benefit from providing a safe refuge for people to turn left. Left-turn pockets help facilitate traffic flow for the through traffic movement since they eliminate the need for stopping in the through

lane. Traffic disruptions reduce the average speed in the traffic stream. In addition, the proposed grade change and realignment of the highway near Tularosa Road improves the sight distance for drivers entering the traffic flow. Therefore, it is important to point out that safety would be a side benefit of the project for two reasons: 1) Additional passing opportunities reduce the number of drivers who might pass under unsafe conditions, and 2) The number of rear-end accidents caused by motorists making left turns would be reduced.

The proposed Build Alternative includes left-turn pockets at all of the public road connections along Highway 246, within the project limits. These include: Tularosa Road, Hapgood Road (west), Campbell Road (west and east) and Drum Canyon Road/Mail Road. Also part of the project proposal is a 1.1-mile-long continuous twoway left-turn lane from Hapgood Road to 3,800 feet west of Campbell Road (east). For all other areas, the project design does not include plans to provide left-turn pockets for non-public roads such as the one known as Tularosa Lane and other private "driveway" locations. Once the construction of the Passing Lanes Project is complete, left-turn movements onto or from private road/driveway locations would be prohibited where passing lanes are installed since it would be considered an unsafe situation. This means that motorists will be limited to a right turn at these locations. A double-yellow-striped 4-foot-wide "soft median" barrier would be placed where private driveways/roads occur in the new passing lane locations, making it apparent that left turns are no longer permitted. Left turns would need to be made at the nearest public road intersection where a left-turn pocket will be added and a legal U-turn allowed. This situation results in out-of-direction travel for distances between 1.4 and 3.3 miles.

Table 2.3 Future Intersection LOS

Intersection with Highway 246	Traffic Direction	Morning Peak		Evening Peak			
		Delay (seconds)	Level of Service	Delay (seconds)	Level of Service		
Purisima Rd	Southbound	9.5	Α	14.3	В		
Roundabout	Eastbound	19.3	В	3.0	Α		
	Westbound	4.5	Α	4.3	Α		
Cebada Canyon	Southbound	11.4	В	36.1	С		
Rd	Eastbound	8.3	Α	13.0	В		
	Westbound	0.0	Α	0.0	Α		
Tularosa Rd	Southbound	11.2	С	19.2	С		
	Eastbound	8.2	Α	12.3	В		
	Westbound	0.0	Α	0.0	Α		
Drum Canyon	Northbound	22.3	С	15.6	С		
Rd/Mail Rd	Southbound	15.4	С	33.6	D		
	Eastbound	0.2	Α	12.0	Α		
	Westbound	0.7	Α	9.0	Α		

Construction of the project could take between 18 months and two years. There would be periods when traffic would be impacted. During the realignment of the highway in the vicinity of Tularosa Road, it is anticipated that the existing travel lanes would accommodate traffic while construction of the new alignment is taking place. At other locations where passing lanes would be added, the existing lanes would be widened to provide additional travel lanes and the traffic would be temporarily detoured back and forth between the various lanes as necessary.

There could be periods of time when the highway shoulders must be closed. There are several organized bicycle rides taking place on this highway every year. Efforts would be made to accommodate bicyclists during this time since the detour options are limited. Caltrans staff would continue to coordinate with the various bicycle organizations in the area. In addition to being invited to the public meetings regarding the two proposed projects on Highway 246, an opportunity to comment on the Transportation Management Plan would be provided prior to construction.

Avoidance, Minimization, and/or Mitigation Measures

1. A Traffic Management Plan would be finalized and put into place to minimize delay and inconvenience to motorists and bicyclists. This would include a

public outreach program, which typically consists of public service announcements, prior to the start of work and continued through the life of the project. Other measures may include:

- COZEEP (Construction Zone Enhanced Enforcement Program)
- Highway Advisory Radio
- Portable changeable message signs
- 2. Establish ongoing coordination with local bicycle groups who use the Highway 246 corridor. Efforts would be made to maintain bicycle access during construction or establish a reasonable detour option.

2.1.7 Visual/Aesthetics

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). To further emphasize this point, the Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with...enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code Section 21001[b]).

Affected Environment

The approximately 9-mile-long section of highway runs through a mostly rural landscape where crops are grown and livestock grazes, with scattered residences and ranch houses as part of the view. La Purisima Golf Course can also be seen north of the highway, east of Cebada Canyon Road.

The character of the existing highway features throughout the project limits are defined mostly by the two-lane highway itself and its 8-foot-wide paved shoulders. The highway becomes wider at several locations where left-turn lanes are provided at cross streets. Standard roadside signage is visible and overhead utilities parallel the highway along much of its length. The Santa Rosa Creek Bridge near the easternmost

end of the project is the only major bridge structure within the project limits. Other seasonal creeks and drainages in the area pass under the highway by way of culverts.

The landform of the area varies from mostly flat to slightly undulating throughout the Lompoc Valley floor, with moderately sized hillsides and mountains rising up to the north and south. The most noticeable variation in topography along the highway occurs near Tularosa Road, where the highway rises approximately 100 feet in elevation as it passes over a small hill. The overall alignment of Highway 246 is a combination of straight sections, with several sweeping curves occurring within the project limits.

In addition to agricultural crops and vineyards seen beyond the roadsides, there are sycamore trees and other vegetation found along seasonal waterways. Vegetation within the highway right-of-way includes scattered oaks, eucalyptus, pines, cypress and other trees. The roadside understory vegetation includes both ruderal grasses and sparse chaparral. The predominant natural vegetation visible on the distant hills is oak woodland and oak savanna. Non-native vegetation and ornamental plantings are associated with the few residential and commercial developments visible throughout the landscape.

The predominantly rural character, undulating landscape, and surrounding natural hillsides combine to provide a fairly high degree of scenic value, although Highway 246 is not classified "Officially Designated" or "Eligible" in the State Scenic Highway system program.

For viewers traveling Highway 246 through the project area, distant views are common, with the surrounding low hills creating the horizon. Highway 246 is one of the main east-west transportation corridors in region. Viewers along this segment of Highway 246 are mostly traveling in motor vehicles and are local residents and workers, commuters, commercial and service users, and tourists. In general, highway users would experience the area as a cumulative sequence of views perceived while moving along the highway and local roadways. The awareness of visual resources by these highway users is expected to vary with their specific activity. For example, local residents may be sensitive to aesthetic issues due to their familiarity as well as their personal investment in the area. Tourists, on the other hand, which make up a portion of the viewers on Highway 246, generally have a high awareness of the visual resources around them, yet may be less sensitive to specific changes in that environment. Commuters often have the sensitivities of local residents, yet at the

same time may experience a reduced awareness of the detailed roadside environment due to the routineness of their commuting activity. Bicyclists frequently seen on this highway due to its relatively flat terrain and scenic quality have a potentially longer duration exposure and a higher level of visual perception.

Environmental Consequences

This project would cause moderate changes to visual character within the project limits. These changes would be due primarily to the increased visibility of "built" characteristics and a reduction in "natural" characteristics. The typical viewer in the area is most likely to notice the somewhat larger scale of the highway facility combined with the associated tree loss. The additional roadway lanes, wider paved shoulders, and the newly disturbed cut and fill slopes would contribute most to the larger perceived scale. The large quantities of earth movement needed to lower the grade and realign the roadway to the south near Tularosa Road would be a noticeable change. The removal of approximately 170 existing mature trees adjacent to the roadway in some places would further contribute to the character change. The visual quality evaluation ratings show that because the existing visual character is primarily one of a sparsely developed rural landscape, the widened scale of the roadway, along with the associated disturbance would result in a minor reduction of vividness, intactness and visual unity (refer to Visual Impact Assessment for further explanation of the Federal Highway Administration analysis method).

The proposed project would have the greatest impact on the visual environment near Tularosa Road. In this location, the highway would shift to the south and be lowered approximately 20 feet, thereby affecting the landform and vegetation in the area. New cut slopes would be required, reaching a maximum height of approximately 40 feet above the new roadway. Once the road is moved to the south, the former location would become a stepped hillside with the placement of a bench (horizontal cut) halfway up the northern slope to help control runoff. A bench would also be constructed midway up the new slope along the southern side of the road. All totaled, approximately 215,430 cubic yards would be excavated and 101,663 cubic yards would be required for the embankment. Removal of native oak trees and chaparral near Tularosa Road to accommodate the new alignment would also contribute to the loss of visual character.

Because of the existing topography and available right-of-way, the project team has determined that bio-swales (vegetated strips) would be used to take advantage of

existing vegetation. This method of treatment would be visually consistent with the existing landform and would best match the rural context.

The proposed viaduct (small bridge) in the vicinity of Campbell pond would be relatively short and would not be very visible from off-site locations. As seen from Highway 246, it would be most noticeable by its bridge rail and concrete deck slab. To most viewers, this small bridge would not appear out of place in this rural highway environment.

A relatively short earthen berm (barrier) proposed to protect a residence from increased noise impacts was offered to the property owner, but was declined (refer to Section 2.2.6). This element of the project is no longer a visual concern.

In general, the relative scale of the project would not detract from the quality of the overall visual environment. With inclusion of the recommended mitigation measures, the regional landscape could accommodate the proposed additional pavement width, earthwork and tree loss associated with this project without losing a substantial amount of visual quality. The greatest negative visual impact associated with this project would be in the area of the vertical curve correction near Tularosa Road, yet with mitigation the full viewing experience for the highway user and community would be consistent with the rural visual character and would not be greatly diminished.

Photo simulations are in Appendix C.

Avoidance, Minimization, and/or Mitigation Measures

- 1. The project would save as many trees as possible, including native and nonnative species through means such as slope warping, tree wells, etc.
- 2. All trees that could not be saved would be replaced. To account for plant mortality and growth rates, a minimum-planting ratio of 10:1 would be used. Native replacement trees would be used. Trees would be replanted as close as possible to where trees were removed, including the area on and near the proposed large cut slopes and benches near Tularosa Road. Planting would include a minimum of a one-year plant establishment period.
- 3. All excavated slopes would include slope rounding and landform grading as appropriate to reduce their engineered appearance and to visually blend with the natural topography of the region.

- 4. Where the highway would be realigned to the south near Tularosa Road, the existing roadway asphalt, road base, and sub-grade would be removed. The surface of the remaining earth would be broken up and loosened (scarified) to create a better planting medium.
- 5. Erosion control seed mixes would include a native shrub component.

2.2 Physical Environment

2.2.1 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A.

In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project

The base floodplain is defined as "the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year. (The volume of water to produce this level of flooding is referred to as the "100-year flow). An encroachment is defined as "an action within the limits of the base floodplain."

Affected Environment

A Location Hydraulic Study and Floodplain Evaluation Report Summary were completed for this project in March 2009. Three Federal Emergency Management Agency (FEMA) designated floodplains are located within the project limits. The floodplains are described as follows:

<u>Unnamed creek located near post mile 13.0</u>: At the western end of the project, this floodplain is created by an unnamed creek located about 400 feet east of Cebada Canyon Road. This creek drains the area south of Cebada Canyon and has a drainage area of approximately 2.8 square miles. It flows from east to west, discharging to agricultural fields located between Highway 246 and the Santa Ynez River.

<u>Unnamed creek located near post mile 15.4</u>: This unnamed creek drains an area of approximately 2.6 square miles upstream of Highway 246 and runs from the north to the south. The creek crosses Highway 246 in a 12-foot-wide by 7-foot-tall reinforced concrete box that discharges into an earthen, grassy channel located between agricultural fields south of Highway 246. The Flood Insurance Rate Map indicates that the floodplain is approximately 300 feet wide where it crosses the highway and is known to overtop the highway. Approximately 4 miles downstream of the culvert, the creek discharges to the Santa Ynez River.

The culverts immediately to the west and east of the post mile 15.4 creek in conjunction with the post mile 15.4 reinforced concrete box act as a system of culverts during high-flow storm events, and therefore, the culverts were studied as a combined system. A detailed study was completed at post mile 15.4 to determine the impacts of the combined culvert system. Additional details are available in the post mile 15.4 Drainage Report, dated March 2, 2009.

Santa Rosa Creek located at post mile 20.2: Santa Rosa Creek is located on the eastern end of the project limits. Santa Rosa Creek drains a watershed area of about 13 square miles that ranges from an elevation of 1,984 feet at Redrock Mountain to an elevation of 390 feet at Highway 246. Santa Rosa Creek begins at elevation 1,400 feet and flows approximately 6 miles south to Highway 246 and then continues about 2 more miles to the Santa Ynez River.

Santa Rosa Creek crosses the highway in a pre-stressed concrete box girder bridge (Bridge No. 52-0139). The Santa Rosa Creek Bridge was replaced in 1999 because of scour and streambed degradation.

All three floodplains within the project limits are classified as Zone "A" floodplain areas, which means the base flood elevation has not been determined. The Santa Barbara County Flood Insurance Rate Maps for the three floodplains are provided in Appendix D.

Environmental Consequences

The proposed improvements do not constitute a longitudinal encroachment on any of the three identified floodplains. There is no incompatible development proposed, and the project does not impact natural and beneficial values provided by the floodplains.

Both the unnamed creek located at post mile 15.4 and Santa Rosa Creek intersect Highway 246 at a nearly perpendicular angle. The proposed widening near the unnamed creek at post mile 13.0 overlaps the edge of the floodplain for roughly 250 feet. The overlap is minimal and does not create a longitudinal encroachment. No significant floodplain-related risks to property or hazards to life are associated with the implementation of the proposed project. The Santa Rosa Creek Bridge is designed to pass the 100-year flood with more than 3 feet of extra capacity (known as freeboard, measured by the distance between the top of the waterline and the top of the channel). The widening of the bridge would not change the freeboard available during the 100-year event. The proposed culverts near the unnamed creek located at post mile 15.4 would convey the 100-year flood flow without overtopping Highway 246. Therefore, the increased roadway profile would not cause significant interruption of emergency services or present a hazard to life. The proposed widening near the unnamed creek located at post mile 13.0 would not pose a significant risk since widening in this area would have an insignificant impact, if any, to the floodplain.

Replacement of the three culverts at post miles 15.17, 15.4 and 15.52 would be part of the project. The increase in culvert sizes will prevent significant change in the 100-year flood elevations.

Avoidance, Minimization, and/or Mitigation Measures
None are required.

2.2.2 Water Quality and Storm Water Runoff

Regulatory Setting

Section 401 of the Clean Water Act requires water quality certification from the State Water Resource Control Board (SWRCB) or a regional water quality control board (RWQCB) when the project requires a federal permit. Typically, this means a Clean Water Act Section 404 permit to discharge dredge or fill into a water of the United States, or a permit from the Coast Guard to construct a bridge or causeway over a navigable water of the United States under the Rivers and Harbors Act.

Along with Clean Water Act Section 401, Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the National Pollutant Discharge Elimination System program to the State Water Resource Control Board and the nine regional water quality control boards. To ensure compliance with Section 402, the State Water Resource Control Board has developed and issued Caltrans a National Pollutant Discharge Elimination System Statewide Storm Water Permit to regulate storm water and non-storm water discharges from Caltrans' right-of-way, properties and facilities. This same permit also allows storm water and non-storm water discharges into waters of the State pursuant to the Porter-Cologne Water Quality Act.

Storm water discharges from Caltrans' construction activities disturbing 1 acre or more of soil are permitted under the Department's Statewide Storm Water National Pollutant Discharge Elimination System permit. These discharges must also comply with the substantive provisions of the State Water Resource Control Board's Statewide General Construction Permit. Non-Departmental construction projects (encroachments) are permitted and regulated by the State Water Resource Control Board's Statewide General Construction Permit. All construction projects exceeding 1 acre or more of disturbed soil require a Storm Water Pollution Prevention Plan to be prepared and implemented during construction. The Storm Water Pollution Prevention Plan, which identifies construction activities that may cause discharges of pollutants or waste into waters of the United States or waters of the State, as well as measures to control these pollutants, is prepared by the construction contractor and is subject to Department review and approval.

Finally, the State Water Resource Control Board and the regional water quality control boards have jurisdiction to enforce the Porter-Cologne Act to protect groundwater quality. Groundwater is not regulated by federal law, but is regulated under the state's Porter-Cologne Act.

Affected Environment

A Water Quality Assessment was completed for the project in January 2009, and a Storm Water Data Report was completed in June 2009.

Highway 246 traverses through the Santa Rita Valley between the Santa Rita Hills to the south and the Purisima Hills to the north. Santa Rita and Santa Rosa Creeks cross the valley and the highway along with other unnamed tributaries of the Santa Ynez

River. The Santa Ynez watershed is under an adopted Total Maximum Daily Load order and is considered impaired from the City of Lompoc to the Pacific Ocean. Total Maximum Daily Load is a limit on the amount of a constituent that can be discharged to meet water quality objectives and protect beneficial uses.

The project is located within the Lompoc Groundwater Basin, which consists of three sub-basins: the Lompoc Plain, Lompoc Terrace and Lompoc Uplands. The Santa Rita sub-area makes up part of the Lompoc Uplands. The primary groundwater quality concerns include contamination with chlorides and total dissolved solids. Almost all of the water used to support the agricultural industry in the Lompoc Groundwater Basin comes from underlying aquifers. Land development has also increased demand for groundwater. According to a 2001 water trend study, the Lompoc Groundwater Basin is experiencing more water being pumped from the aquifers than is being recharged to them by 912 acre feet per year.

Environmental Consequences

Temporary Impacts

About 40 acres of soil would be disturbed during construction of the project. With this disturbance, there are other concerns that need to be addressed:

Erosion – Rain events, concentrated storm water discharges, and dust generation can have a significant temporary effect on surface water quality during construction. A Storm Water Pollution Prevention Plan would be prepared for the proposed project to address concerns with erosion and other storm water pollutants.

Pollutants of concern – Potential sources of temporary surface water impacts include construction materials, contaminants in the roadway, vehicle leaks, traffic accidents, inadequate stockpile management, concrete waste, saw cutting disposal and illegal dumping. Temporary construction site storm water best management practices would be implemented to minimize or eliminate chemical releases to ground and surface waters. A sampling and analysis plan for non-visible pollutants would be included in the Storm Water Pollution Prevention Plan.

Permanent Impacts

Permanent impacts to water quality could occur following construction of the project if appropriate storm water best management practices are not incorporated. The proposed project would be designed and constructed to be as hydraulically separate from the watershed it crosses, as possible. It has been estimated that the Build Alternative would increase the amount of impervious surface area by 13.6 acres

within the project area. The greater impervious surface would increase the rate and volume of storm water runoff. Highway pollutants are discharged from the road surfaces during storm events, which affect water quality. Concentrated flows from the highway surface often create erosion that causes gullies, alters creeks, and discharges sediment into waterways.

Avoidance, Minimization, and/or Mitigation Measures

- 1. Staging areas for construction equipment and materials would be located in upland locations at least 100 feet from all waterways, wetlands and creekside areas.
- 2. The proposed project would be designed and constructed to avoid direct discharge into the watershed as much as possible by avoiding and minimizing temporary and permanent disturbances to existing wetlands and riparian corridors. Where temporary disturbances to wetlands and riparian corridors are unavoidable, reasonable measures to maintain the original grade and soil characteristics would be implemented to prevent permanent wetland loss.
- 3. To address a location where there's standing water at the base of a slope, an under-drain would be installed on the northerly side of the highway between post miles R14.5 and R14.6 This drain would prevent ground water from saturating the roadway.
- 4. Categories of best management practices that address temporary construction site impacts include temporary soil stabilization, temporary sediment control, wind erosion minimization, tracking control, non-storm water management, waste management, and temporary construction of features. Site storm water best management practices would be implemented to minimize or eliminate chemical releases to ground and surface waters. A sampling and analysis plan for non-visible pollutants would be included in the Storm Water Pollution Prevention Plan for the project.
- 5. Because the proposed project would create more than 1 acre of new impermeable surface, permanent best management practices are required. During a Caltrans staff survey of the project limits to identify appropriate areas to treat storm water, the team concurred that the rural nature of the project area and the available state right-of-way make it easy to maintain existing vegetation that can function as bio-swales. When the treatment measures are finalized during the design phase, the bio-swales will be located

to avoid sensitive habitats such as wetlands and areas containing sensitive species.

6. Hydrology – The project will minimize storm water runoff rates and volumes by encouraging sheet flow, preserving vegetation, minimizing impervious surfaces, and encouraging the temporary storage and infiltration of storm water within the right-of-way.

2.2.3 Geology/Soils/Seismic/Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans Division of Geotechnical Services is responsible for assessing the seismic hazard for Caltrans projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE) from young faults in and near California. The Maximum Credible Earthquake is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

Affected Environment

A Preliminary Geotechnical Report was completed in July 2008.

The project area is located near the northern margin of the Transverse Ranges Geomorphic Province, just outside of the southern margin of the Coast Ranges Geomorphic Province. The Transverse Ranges province is characterized by east-west trending mountain ranges and faults. The Purisima Hills lie to the north of the project area, and the Santa Rita Hills lie to the south. The terrain along the roadway alignment within the project limits is flat to moderately sloping. Roadway elevations in the project area range between approximately 130 feet and 560 feet. The project area contains hills and dissected plains between the Santa Ynez River and Santa Ynez fault on the south, the Santa Maria Valley on the north, and the San Rafael Mountains on the northeast. Based on published geologic literature, the project area is underlain by a combination of Quaternary valley and floodplain deposits consisting of silt, sand,

gravel and clay; Quaternary older alluvial deposits consisting of gravel, sand, and clay; and Quaternary Orcutt sand, which is wind deposited.

Seismicity

The proposed project is located within an area of high seismic activity. The Santa Ynez River Fault, which runs along the length of the project, is the controlling fault at this site. The fault has a maximum credible earthquake moment magnitude of 7.50. The moment magnitude scale, replaces the old Richter scale of earthquake energy measurement. Caltrans' Seismic Hazard Map locates the fault about 1.93 miles south of the highway at the westerly project limit, 1.33 miles south of the highway at post mile R15.7, and as close as 0.22 mile south of the roadway near the easterly limit of the project. Ground rupture hazard at the project location is considered moderate due to the close proximity of the Santa Ynez River Fault.

Liquefaction

Liquefaction is the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from seismic ground shaking; in effect, the soil behaves like a liquid rather than a solid. Liquefaction potential depends on soil type and relative density of the soil, depth to ground water, and degree of seismic shaking.

Slope Stability

There are several cut slopes along the existing highway alignment within the project limits. They range in height from 10 feet to 60 feet. Slope inclines are typically 2:1. Overall, the slopes appear stable, but most are experiencing some degree of erosion damage.

Environmental Consequences

There are highly erodible soils in the project area because of the high concentration of fines, sands and silts. There is potential for the project to be affected by seismic activity both during construction and once the project is complete. The measures listed below would address the problems and reduce the impacts.

Embankments founded on liquefiable soils may be subject to slope instability and settlement during an earthquake. Similarly, earth-retaining structures may settle or overturn should the soils beneath them liquefy.

Erosion of the new cut slopes is a potential concern. Without landform grading and an aggressive revegetation plan, increased erosion would be likely as this area is known for having highly erodible soils.

Liquefaction potential in the project area may be an issue if the weakly consolidated alluvial deposits common to the area become saturated with water.

Avoidance, Minimization, and/or Mitigation Measures

- 1. All new cut slopes and embankments would have slope angles of 2:1 or flatter. Cut slopes greater than 30 feet in height would be interrupted at mid slope by benches (flat areas between sloped segments). Paved ditches would be incorporated into the benches to convey run-off from the slopes above.
- 2. A comprehensive revegetation and erosion control plan would be incorporated into the design. Where appropriate, slopes will be minimized and rounding will be implemented. Disturbed areas will receive a compost layer and hydroseeded with a native seed mix appropriate to the region.
- 3. New embankments and areas where embankments would be widened would be constructed with slopes of 2:1 or flatter. Steeper slopes, up to 1.5:1, are feasible if the embankments are constructed of select material conforming to acceptable, defined specifications.

If select material is not available from local sources, it is recommended that the steeper embankments be reinforced with geogrid fabric, a product used for stabilizing soils.

2.2.4 Hazardous Waste or Materials

Regulatory Setting

Many state and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980. The purpose of the Comprehensive Environmental Response, Compensation and Liability Act, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. The Resource Conservation and Recovery Act provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include the following:

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

An Initial Site Assessment prepared November 26, 2008 found no evidence of permanent hazardous waste sites in the project limits. The only items identified include the potential to encounter thermoplastic painted stripe and treated wood waste during construction. Both of these materials are commonly found on state highways as a result of past construction practices. One bridge in the project limits is targeted for replacement. The as-built plans for the Santa Rosa Creek Bridge were evaluated. The bridge was replaced in the late 1990s and appears to be absent of asbestoscontaining materials.

Environmental Consequences

Because thermoplastic painted stripe containing lead paint and treated wood waste are often found during construction, there are Caltrans special provisions developed to

address them. If these materials were found, the provisions would be added to the construction contract. Although the as-built plans show no indication of asbestos materials, an inspection of the Santa Rosa Creek Bridge would be required prior to the design phase. If there were any evidence of asbestos, appropriate specifications would be added to the construction contract to address disposal of the material.

Avoidance, Minimization, and/or Mitigation Measures

- 1. If thermoplastic painted stripe containing lead were encountered, appropriate Caltrans special provisions would be added to the project.
- 2. If treated wood were encountered, appropriate Caltrans special provisions would be added to the project.
- 3. If asbestos were encountered, appropriate Caltrans special provisions would be added to the project.

2.2.5 Air Quality

Regulatory Setting

The Clean Air Act, as amended in 1990, is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the concentration of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards. Standards have been established for six criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to the State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional-level conformity is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20.

Based on the projects included in the Regional Transportation Plan (RTP), an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as the Santa Barbara County Association of Governments and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the Regional Transportation Plan is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the Regional Transportation Plan must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the Regional Transportation Plan, then the proposed project is deemed to meet regional conformity requirements for purposes of the project-level analysis.

Conformity at the project level also requires "hot spot" analysis if an area is in "nonattainment" or "maintenance" for carbon monoxide and/or particulate matter. A region is a "nonattainment" area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called "maintenance" areas. "Hot spot" analysis is essentially the same, for technical purposes, as carbon monoxide or particulate matter analysis performed for National Environmental Policy Act and California Environmental Quality Act purposes.

Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the carbon monoxide standard to be violated, and in nonattainment areas, the project must not cause any increase in the number and severity of violations. If a known carbon monoxide or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Affected Environment

An Air Quality Study was prepared for the project in March 2009 (revised in July 2009).

The project is located about 14 to 20 miles from the Pacific Ocean to the west and 11 to 14 miles from the Pacific Ocean to the south. The project is separated from the ocean to the south by the Santa Ynez Mountains that have elevations up to 2,200 feet.

The project is located in the South Central Coast Air Basin. Santa Barbara County is one of three counties in this basin. Because the project is located in an area that is in attainment or unclassified for all National Ambient Air Quality Standards, the proposed project is exempt from regional conformity requirements. Table 2.4 lists pollutants, state and federal standards, state and federal attainment status, effects and sources.

Table 2.4 Federal and State Attainment Status

Criteria Pollutant	Federal Standard (National Ambient Air Quality Standards)	Federal Attainment Status	State Standard	State Attainment Status
Carbon monoxide (CO)	9.0 ppm* (10 mg/m ³ (8-hour)	Attainment/ unclassified	9 ppm (10 mg/m ³ (8-hour)	Attainment
Nitrogen dioxide (NO2)	0.053 ppm (100 µg/m³) (Annual Arithmetic Mean)	Attainment/ unclassified	0.030 (56 µg/m³) (Annual Arithmetic Mean)	Attainment
Ozone (O ₃)	0.08 ppm (100 μg/m ³) ^(8-hour)	Attainment/ unclassified	0.070 (137 μg/m ³) (8-hour)	Non-attainment
Respirable particulate (PM ₁₀)	150 μg/m ³ (24-hour) 	Unclassified	50 μg/m ³ (24-hour) 20 μg/m ³ (Annual Arithmetic Mean)	Non-attainment
Fine particulate (PM _{2.5})	15 μg/m ³ (Annual Arithmetic Mean)	Attainment/ unclassified	12 μg/m ³ (Annual Arithmetic Mean)	Attainment

*ppm=parts per million Source: http://www.arb.ca.gov/desig/adm/adm.htm µg/m³ =micrograms per cubic meter

Environmental Consequences

Long-term Impacts

The Air Quality Study concluded the proposed project does not create new hot spots (intersections) that could raise local levels of carbon monoxide, a low-speed and idling emission. Therefore, a carbon monoxide hot spot analysis is not required for this project.

A particulate matter analysis is another requirement to be considered for proposed projects. Since the proposed project does not have a high diesel traffic count and does

not create new, congested intersections, a particulate matter hot spot analysis is not required.

Mobile Source Air Toxics

There are no sensitive land uses (schools, medical centers, health care or child care facilities, parks or playgrounds) within 500 feet of the project corridor. Furthermore, heavy-duty trucks, most of which have diesel engines, make up a small portion of the peak-hour traffic (6%). Additionally, highways with less than 150,000 average annual daily traffic volumes have been determined by the U.S. Environmental Protection Agency to have little to no potential for mobile source air toxics significance. Traffic volumes on Highway 246 through the project would fall into this classification.

Short-term Construction Impacts

Construction of the proposed project would generate short-term increases in local air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during excavation, grading, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors at some residences very close to the right-of-way could cause occasional annoyance and spur complaints from sensitive receptors nearby.

Santa Barbara County does not have construction emission thresholds for air pollutants because these have been included in its air emissions budget for all projects listed in the Regional Transportation Improvement Plan. However, the County requests a calculation of expected emissions for every project that disturbs soil. The anticipated amount of grading and excavation expected with the project is about 40 acres. Table 2.5 shows how the average daily grading amount was derived, and from this, the average daily and quarterly emissions of fugitive dust (respirable particulate matter, or PM_{10}).

Table 2.5 Estimated Construction Emissions (PM₁₀) from Grading

Activity	No-Build	Build Alternative
Total area to grade (acres)	0	40
Length of exposure (working days)	0	1/4 of 2.5 years (138 working days)
Max grading per day (acres)	0	40/138= 0.29 acre
Total Pm ₁₀ /day at 32.3 lb. ¹ per acre/day (pounds)	0	0.29 * 32.3=9.4 pounds per day
Quarterly PM ₁₀ (tons)	0	9.4 pounds *66 (days per quarter) =620/2000=0.31

According to Monterey Bay Unified Air Pollution Control District, grading and excavation of 2.2 acres per day would generate less than 32.3 pounds per day per acre. Grading 8 acres per day would generate less than 10.25 pounds per acre.

Naturally Occurring Asbestos (NOA)

Santa Barbara County is among the counties listed as containing serpentine and ultramafic rock (Governor's Office of Planning and Research, October 26, 2000). However, the Geologic Map of California—Santa Maria Sheet (California Division of Mines and Geology, 1959) shows that there are no serpentinitic bodies in the drainage basin above the site. Therefore, it is unlikely that any naturally occurring asbestos would be found at the site. However, Caltrans intends to comply with Santa Barbara County Air Pollution Control District regulations by conducting a study and requesting an exemption permit from Santa Barbara County Air Pollution Control District (see the Hazardous Waste Technical Study for more information).

Santa Rosa Creek Bridge would be widened as part of the project. Although asbestos is not anticipated to be an issue, it should be noted that it is the responsibility of the contractor to comply with the Rules and Regulations established by the Santa Barbara County Air Pollution Control District.

Avoidance, Minimization, and/or Mitigation Measures

Most of the construction impacts to air quality would be short term and would not result in adverse or long-term conditions. Implementation of the following measures would reduce any air quality impacts resulting from construction activities.

The construction contractor would comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications (1999). Section 7, "Legal Relations and Responsibility," addresses the contractor's responsibility on many items of concern, such as air pollution; protection of lakes, streams, reservoirs,

and other water bodies; use of pesticides; safety; sanitation; convenience of the public; and damage or injury to any person or property as a result of any construction operation. The provisions of Caltrans Standard Specifications, Section 7-1.0F (Air Pollution Control) requires the contractor to comply with Santa Barbara County Air Pollution Control District rules, ordinances, and regulations. These requirements include daily watering of all areas disturbed by construction activities. State Health and Safety Code requires the contractor to prevent visible dust from leaving the construction site. Examples of measures that would be used to reduce air quality impacts include:

- Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions.
- Spread soil binder on any unpaved roads used for construction purposes and on all construction-parking areas.
- Develop a special dust control plan documenting appropriate dust suppression methods, temporary paving, speed limits, and prompt revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.

2.2.6 Noise

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project would have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with Federal Highway Administration (and Caltrans, as assigned) involvement, the Federal-Aid Highway Act of 1970 and the

associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use under analysis. For example, the noise abatement criteria level for residences (67 dBA) is lower than the noise abatement criteria for commercial areas (72 dBA). Table 2.6 lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

Table 2.6 Noise Abatement Criteria Levels

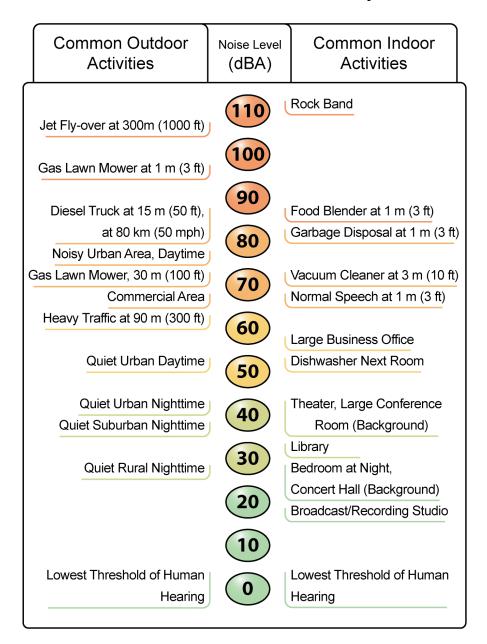
Activity Category	Noise Abatement Criteria, A-weighted Noise Level, Leq(h)	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
В	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals
С	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D		Undeveloped lands
E	52 Interior	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Source: Caltrans Traffic Noise Analysis Manual (2006).

A-weighted decibels are adjusted to approximate the way humans perceive sound. Leq(h) is the steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual time-varying levels over 1 hour.

Table 2.7 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Table 2.7 Common Noise Activity Levels



In accordance with Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-decibel or more increase) or when the future noise level with the

project approaches or exceeds the noise abatement criteria. Approaching the noise abatement criteria is defined as coming within 1 decibel of the noise abatement criteria.

If it is determined that the project would have noise impacts, potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This section discusses noise abatement measures that would likely be incorporated in the project.

Caltrans Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5-decibel reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources, and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents' acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agency input, newly constructed development versus development pre-dating 1978, and the cost per benefited residence.

Affected Environment

The Noise Analysis was completed for the project March 18, 2009 (revised 2009).

The area within the project corridor is largely rural and agricultural with scattered residences and a golf course at post mile 13.6. Most residences in the corridor are set well back from the highway; however, a relative few are within 250-300 feet of the roadway.

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the proposed project. Referring back to Table 2.6, this evaluation determined the activity categories these areas fall into. Single-family residences, multi-family residences, and an outdoor recreation area (the golf course) were identified as activity category B land uses in the project area. Agricultural fields that compose the bulk of the area are activity category D land uses.

Although all developed land uses were evaluated in this analysis, noise abatement is only considered for areas of frequent human use that would benefit from a lowered noise level (as required by the noise analysis protocol). Accordingly, this impact analysis focuses on locations with defined outdoor activity areas, such as residential backyards and common use areas at multi-family residences. There were 11 receptors considered throughout the project area.

Environmental Consequences

Although 11 receptors were considered, only one receptor met the criteria for noise abatement as indicated below in Table 2.8. Information for the other receptors is found in the noise study.

Table 2.8 Proposed Noise Abatement

Receptor # and Location	Existing Noise Level (dBA)	Predicted Design Year Noise Level without Project (dBA)	Predicted Design Year Noise Level with Project (dBA)	Predicted Design Year Noise Level with Abatement (dBA)		Reasonable and Feasible?	
				6-foot berm*	8-foot berm	10+-foot berm	
5 – Single Residence, corner of Hwy. 246/ Hapgood	71	73	74	67	66	Not considered due to right-of- way limitation	Yes

^{*}Indicates height of proposed wall to be included in project.

Receptor 5 represents one home on the corner of Highway 246 and Hapgood Road. Measurements taken at Receptor 5 indicate that the existing noise level at that location is 71 decibels. The future noise level with the project is predicted to be 74 decibels and without the project is predicted to be 73 decibels. Because the noise level in the design year is predicted to exceed the noise abatement criterion (67 dBA $L_{eq}[h]$), noise abatement needs to be *considered* at this receptor according to the noise analysis protocol.

To achieve a 5-decibel reduction, a 6-foot noise barrier would be needed. Due to the rural location of this receptor, and the presence of residences on the opposite side of the highway, a masonry wall is not considered appropriate at this location. The model shows that a 6-foot-tall, 300-foot-long earthen berm would reduce noise levels at Receptor 5 by 7 decibels and is therefore recommended at this location.

A berm must be four times wider at the bottom than it is high. Preliminary estimates determined that the berm could be constructed within highway right-of-way, which is approximately 40 feet wide in the vicinity of Hapgood Road. The proposed berm would parallel the highway for 150 feet on either side of the residence. The total reasonable cost is \$54,000, while building the berm is estimated to cost \$30,000. When the total cost of the barrier is less than the reasonable cost allowance, then the barrier could be incorporated into the project subject to the property owner's approval.

The Caltrans Noise Analysis Protocol requires a District Noise Abatement Decision Report (Appendix H) during the environmental process to document the following:

- Noise abatement reasonableness allowances, from the Noise Study Report
- Acoustic feasibility of noise abatement
- Locations and dimensions of evaluated noise barriers
- Engineering estimates of acoustically feasible noise abatement
- Other construction considerations related to noise barriers (i.e., known utilities, etc.)
- Effects of abatement on other environmental resources (i.e., scenic views, biological, etc.)
- The recommendation would become the final abatement recommendation unless changed during public review

Avoidance, Minimization, and/or Noise Abatement

Based on the completed noise studies, Caltrans proposed noise abatement as part of the project. The proposed barrier would have consisted of an earthen berm at Hapgood Road/Highway 246 (refer to Figure 2.1). Opportunity for the noise berm was offered to the property owner in a letter mailed on February 9, 2010. A reply was received from the property owner on March 9, 2010, which indicated the owner was not interested in pursuing a noise barrier adjacent to their property (refer to Appendix I). Therefore, the earthen berm will not be constructed as part of the project.

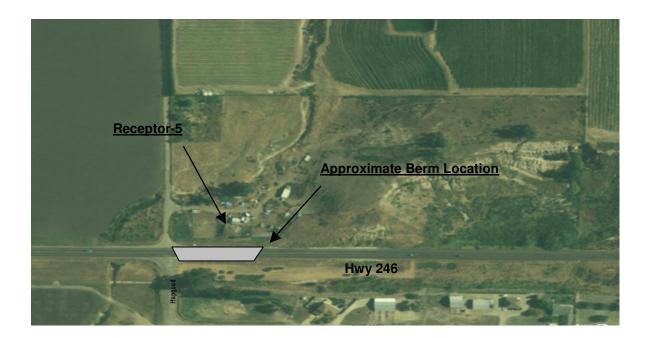


Figure 2.1 Proposed Noise Barrier (Earthen Berm)

2.3 Biological Environment

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in Threatened and Endangered Species, Section 2.3.5. Wetlands and other waters are discussed in Section 2.3.2.

California Senate Resolution 17 declares that State agencies would "undertake, in the performance of their duties and responsibilities, to preserve and protect native oak woodlands to the maximum extent feasible and consistent with the performance of their duties and responsibilities, or provide for replacement plantings where blue, Engelmann, valley, or coast live oak are removed from oak woodlands…"

Affected Environment

The Santa Rita Valley is largely rural in character. Agriculture is the prevailing land use in the area and includes livestock grazing, dry farming, irrigated row crops and vineyards. Nestled between the agricultural fields are stands of native oak woodland, areas of coastal scrub and grassland plant communities.

Coastal scrub: Central Coast scrub includes coyote bush, sticky monkey flower, poison oak, California coffeeberry and other perennial shrubs. This community was found in approximately 40 percent of the biological study area.

Oak Woodland: The one dominant tree in this community is the evergreen coast live oak. The woodland is mostly closed canopy stands with an occasional solitary oak. This community was found in approximately 2 percent of the biological study area. Coast live oak woodlands were found in patches throughout the biological study area.

Riparian woodland: The riparian areas on the eastern portion of the project tend to be dominated by arroyo willow while riparian areas in the western portion tend to be a mix between arroyo willow and coast live oak as the dominant trees. This community is found in approximately 1 percent of the biological study area.

Annual grassland: This plant community, which is dominated by non-native annual grasses and a mix of native and non-native forbs (non-grassy small plants), covers approximately 44 percent of the biological study area.

Environmental Consequences

A total of 107 oak trees would be removed to construct the project. Trees within the cut-and-fill areas of the proposed project that are 6 inches or bigger in diameter at breast height were included in the count. Of the total oaks to be removed, 20 have a

diameter at breast height greater than 18 inches, and 87 of the trees are between 6 and 18 inches diameter at breast height.

There is a Santa Barbara County zoning ordinance that addresses deciduous oak trees, but no ordinance that applies to Coast Live Oak trees. County staff confirmed that the County replacement standard for Coast live oaks and other evergreen species is typically 10:1. The project would include a 10:1 replacement ratio, which is consistent with County mitigation requirements.

Avoidance, Minimization, and/or Mitigation Measures

The project would designate environmentally sensitive areas to minimize oak woodland and oak tree impacts. The final project plans would delineate environmentally sensitive areas around the drip lines of all oak trees that the project would not remove within the proposed right-of-way and temporary construction easements. No vehicle access would be permitted within these environmentally sensitive areas.

The existing state right-of-way along the project limits is wide and contains areas that would be suitable for oak plantings. For all oak trees having a diameter greater than 6 inches, Caltrans would plant 10 oak trees (one-gallon size) for each tree removed. Based on these ratios, a total of 1,070 oak trees would be planted in unaffected habitat adjacent to the project.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S. Code 1344) is the main law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of: hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers with oversight by the Environmental Protection Agency.

The Executive Order for the Protection of Wetlands (11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this order states that a federal agency, such as the Federal Highway Administration, and Caltrans as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated mainly by the California Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. The California Coastal Commission requires the presence of only one attribute (e.g., hydrology, hydric soils, or hydrophytic vegetation) for an area to qualify as a wetland.

Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that would substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Game before beginning construction. If the California Department of Fish and Game determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. The California Department of Fish and Game jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Wetlands under jurisdiction of the Army Corps of Engineers may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the Department of Fish and Game.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The Regional Water Quality Control Boards also issue water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

Affected Environment

Wetlands, waters of the United States and riparian areas occurring within the Biological Study Area were identified (see Appendix E), including ephemeral (short-lived or intermittent, often seasonal) drainages and streams. Wetland delineation (defining the boundaries of the wetland) was completed at the ponds just east of Campbell Road and is referenced as Location H (see Appendix E). All three wetland parameters as identified by the Army Corps of Engineers were present at the ponds: water-loving vegetation, wetland hydrology, and soils subject to saturation/inundation. Due to the limited access to the ponds at Location H, the wetlands within the right-of-way were only delineated in the field. The rest of the pond delineation was completed using aerial photographs. Ephemeral drainages and streams, along with associated riparian areas were also mapped for California Department of Fish and Game jurisdiction.

Environmental Consequences

The following table shows the amount of permanent and temporary impacts that the project would have on waters of the United States, wetlands and riparian areas.

Table 2.9 Jurisdictional Areas within the Biological Study Area

Affected Resource	Impacts (acres)			
Allected nesource	Temporary	Permanent		
Waters of the United States	0.073	0.108		
Wetlands	0.070	0		
Riparian	0.032	0.012		

The project would permanently impact 0.108 acre of waters of the United States. This number was determined by taking the area from the existing pavement up to the "cut/fill" line (as labeled in the mapping in Appendix E). Construction-related activities would temporarily impact 0.073 acre of waters of the United States. This number was determined by taking the portion of waters beyond the cut/fill line to the proposed right-of-way line (as labeled in Appendix E).

The project would temporarily impact identified wetlands that occur at Location H (see Appendix E). These impacts would not be caused by fill placement, but by

disturbances from equipment in the area to construct the amphibian undercrossings, which are proposed mitigation for this project.

Construction activities associated with the project would result in both permanent and temporary impacts to riparian areas. The project would permanently impact 0.012 acre of riparian area and would temporarily impact 0.032 acre of riparian area. Permanent impacts were determined by calculating the portion of riparian areas beyond the existing pavement, up to the cut/fill line (as labeled in Appendix E mapping). The portion of riparian area beyond the cut/fill line to the proposed right-of-way line (as labeled in Appendix E mapping) was calculated as temporary impacts.

Because the proposed Build Alternative serves as the wetland avoidance alternative, it is also considered to be the Least Environmentally Damaging Practicable Alternative (LEDPA). The project's configuration was designed to avoid permanent impacts to wetlands as compared to the Four-Lane alternative, which was considered and rejected. Other impacts are minimized to every extent possible.

Avoidance, Minimization, and/or Mitigation Measures

- 1. Originally the project was designed with the current Caltrans standard of 4:1 cut-and-fill slopes for the entire alignment. These initial designs would have filled an ephemeral vernal pool located east of Tularosa Road and south of the alignment. Also, long segments of several ephemeral drainages that run parallel to the alignment would have been filled. An exception from the Caltrans design standards was approved August 6, 2009. This exception reduces the cut-and-fill slopes from 4:1 to 2:1 for two segments of the new alignment: Tularosa Road and Campbell Pond. The design exception, which allows 2:1 slopes in two crucial areas, avoids the need to permanently fill wetlands and affect additional waters of the United States. The steeper slopes also reduce the removal of riparian habitat.
- 2. Restoring degraded waterways in the right-of-way, within the project limits, would mitigate permanent impacts to waters of the United States and riparian areas. Temporary impacts to riparian areas (and waters of the United States) would be restored to original contours and revegetated with native species in coordination with the Army Corps of Engineers, the Regional Water Quality Control Board and the California Department of Fish and Game during the permit process. The temporary impacts to wetlands will occur at the fringe of the Campbell Ponds. This area would be restored to original contours after

construction activities and left to naturalize from the plentiful wetland vegetation that occurs around the remainder of the undisturbed pond.

- 3. All areas beyond the minimum required for construction would be off limits to any construction activities.
- 4. Environmentally Sensitive Areas would be identified on the plans to avoid any equipment storage or staging in riparian areas. All storage/stockpile areas would be located in uplands.
- 5. A Storm Water Prevention Plan would be implemented during construction as directed by the Caltrans National Pollutant Discharge Elimination System statewide stormwater permit.
- 6. Work within actively flowing water would be avoided where feasible.

2.3.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service and California Department of Fish and Game share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special-status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act and/or the California Endangered Species Act. Please see the Threatened and Endangered Species Section 2.3.5 in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including California Department of Fish and Game fully protected species and species of special concern, U.S. Fish and Wildlife Service candidate species, and non-listed California Native Plant Society rare and endangered plants.

The regulatory requirements for Federal Endangered Species Act can be found at United States Code (USC) 16, Section 1531, et seq. See also 50 CFR Part 402. The regulatory requirements for the California Endangered Species Act can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also

subject to the Native Plant Protection Act, found at Fish and Game Code, Sections 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

A Natural Environment Study was prepared in July 2009. Botanical surveys were conducted throughout spring and summer of 2007, from April 6 through June 26. Plant surveys were timed to coincide with the spring and summer flowering periods for sensitive plants having potential to occur in the project study area. The following listed special-status plant species were found:

- Black-flowered figwort The plant is described as a tall perennial herb with long, branched urn-shaped dark red flowers. It occurs in chaparral, coastal dunes, coastal scrub, and riparian scrub habitats in Santa Barbara and southern San Luis Obispo counties. Small populations of black-flowered figwort were found scattered throughout the biological study area. Several plants were discovered mostly within coastal scrub with dense coyote bush stands. Occasionally, plants were discovered within riparian areas.
- Sand mesa manzanita The plant is described as an erect shrub growing from a burl up to six feet tall. It is found growing in sandy soils in chaparral and coastal sage scrub plant communities. The plant blooms from November through February and is only found on the southern Central Coast. Less than five sand mesa manzanita shrubs were discovered within the biological study area near Santa Rita Road.

Environmental Consequences

A limited number of black-flowered figwort individuals may be displaced as a result of construction-related activities. Removal of a limited number of this plant during the project's construction would not exceed any threshold that could trigger the need to place the species under an endangered status.

No impacts to sand mesa manzanita are anticipated during construction.

Avoidance, Minimization, and/or Mitigation Measures

 The areas where black-flowered figwort plants are found would be avoided to the maximum extent practicable. Areas would be off-limits to construction activities, designated as an Environmentally Sensitive Area on the plans sheets, and delineated on the ground during construction. Any plants that have apparent viable seed and cannot be avoided would be salvaged and deposited on the surface in unaffected habitat adjacent to the project.

 The manzanita plants would be avoided. Areas where they were found would be off-limits to construction activities. The areas would be designated as an Environmentally Sensitive Area on the plan sheets, and delineated on the ground during construction.

2.3.4 Animal Species

This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.3.5. All other special-status animal species are discussed here, including California Department of Fish and Game fully protected species and species of special concern, and the U.S. Fish and Wildlife Service or National Oceanic and Atmospheric Fisheries Service candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- Marine Mammal Protection Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601–1603 of the Fish and Game Code
- Sections 4150 and 4152 of the Fish and Game Code

Affected Environment

The animal community within the biological study area and project vicinity has been slightly impacted by agricultural uses, low-density residential development and a private golf course. Within this rural setting, there was a fair amount of wildlife observed. Many common species were observed including western fence lizard, California side-blotched lizard, big-eared wood rat, mule deer, blacktail hare, turkey

vulture, red-tailed hawk, western scrub-jay, western bluebird, red-winged blackbird and house finch.

The following species are classified as California Species of Special Concern:

- Southwestern pond turtle
- Loggerhead shrike
- California horned lizard
- Western spadefoot toad
- American badger

Southwestern pond turtle

This subspecies of the western pond turtle is the only native turtle in California. Breeding occurs underwater. The eggs are usually laid in upland areas neighboring the aquatic habitat frequented by adults. Pond turtles use upland areas for refuge and nesting. Movement by western pond turtles has been found to occur over a traveling distance of 262 feet to upland nesting sites from water. Western pond turtles were observed basking and swimming in the Campbell ponds.

Loggerhead shrike

Shrikes are carnivorous birds that feed on large insects, birds, mice, and lizards, which they kill with a powerful blow by the beak. Shrikes build their nests in shrubs or trees and live in open fields and scrub. Loggerhead shrikes are a fairly common resident found throughout the United States. Habitat loss and pesticides have been implicated in their decline. A loggerhead shrike was observed within the biological study area during surveys for California tiger salamander in 2007.

California horned lizard

The California horned lizard inhabits open country of Central California, mostly along the western portion of the San Joaquin Valley through the Coast Range. It prefers sandy areas, washes, floodplains, and windblown deposits in a variety of habitats. Egg laying occurs from late May through June, and hatching occurs after two months. A California horned lizard was observed within the biological study area during botanical surveys in 2007.

Western spadefoot toad

The western spadefoot toad is a California Species of Special Concern and a former federal species of concern. The western spadefoot toad measures 1.5 to 2.4 inches in length and is dusky green or gray above, and whitish below without markings. It

prefers valley and foothill grasslands, open chaparral, and pine-oak woodlands. The western spadefoot toad breeds in winter and spring in quiet streams and vernal pools. Vernal pools and other ephemeral wetlands have been substantially reduced by agriculture and development, which reduces the toad's habitat. A single adult western spadefoot toad was incidentally caught in the California tiger salamander upland drift fencing near the larger Campbell Pond and released unharmed. It is assumed that they also exist at the smaller pond since the two ponds are adjacent.

American badger

The American badger is a California Species of Special Concern. The American badger is mostly gray, with a white stripe from the nose leading to the shoulders between the eyes. Badgers dig burrows in soft, crumbly soil for cover and prefer dry, open areas in shrub, forest and herbaceous habitats. They are carnivorous and feed on rats, mice, ground squirrels, some reptiles, insects, eggs, birds, and carrion. A burrow with markings and shape characteristic of the American badger was identified within the Caltrans right-of-way on the cut slope near the travel way. The burrow was observed just east of the entrance to Purisima Golf Course.

Environmental Consequences

Southwestern pond turtle

The project would permanently remove potential upland habitat for western pond turtles. Temporary impacts would include the areas within the limits of the Campbell ponds. With the proposed avoidance measures, the project could affect the western pond turtle, but would not be expected to trigger listing as an endangered species.

Loggerhead shrike

Potential effects could include the displacement of the shrike to another area or degradation of suitable nesting habitat. With the avoidance measures in place, the project could affect the loggerhead shrike, but would not be expected to trigger listing as an endangered species.

California horned lizard

The project would permanently remove upland habitat for the California horned lizard. Individual lizards could be crushed during construction activities. With the avoidance and minimization measures in place, the project may affect the California horned lizard, but would not be expected to trigger listing as an endangered species.

Western spadefoot toad

There would be a loss of upland habitat for the western spadefoot toad and possible incidental mortality for individuals harboring within the Caltrans right-of-way during construction. With the avoidance and minimization measures in place, the project may affect the western spadefoot toad, but would not be expected to trigger listing as an endangered species.

American badger

There would be a loss of upland habitat for the American badger. With the identified avoidance and minimization measures, the project may affect the American badger, but is not likely to trend toward listing for the species.

Avoidance, Minimization, and/or Mitigation Measures

Southwestern pond turtle

- 1. All areas beyond the minimum required for construction would be off limits to construction activities to minimize effects to aquatic habitat, potential upland nesting habitat, and potential refuge sites. Environmentally Sensitive Areas would be delineated to prohibit such activities.
- 2. Any individual encountered in the work area during pre-construction surveys for the California tiger salamander and California red-legged frog would be relocated to suitable habitat.
- 3. The installation of undercrossings (refer to Section 2.3.5 for details on mitigation for the California tiger salamander) could open up new areas of upland. Newly installed barriers would prevent future road kill at these locations.

Loggerhead shrike

Measures would be included in the standard special provisions to protect all migratory birds, including loggerhead shrikes (see Section 2.3.4).

California horned lizard

All areas beyond the minimum required for construction would be off limits to construction activities. Any individuals encountered in the work area during preconstruction surveys for the California tiger salamander and California red-legged frog would be relocated to suitable habitat.

Western spadefoot toad

All areas beyond the minimum required for construction would be off limits to construction activities. Any individuals encountered in the work area during preconstruction surveys for the California tiger salamander and California red-legged frog would be relocated to suitable habitat. Amphibian undercrossings and barriers that are part of this project would reduce potential road kill of western spadefoot toad.

American badger

To minimize effects to habitat, all areas beyond the minimum required for construction would be off limits to construction activities. Potential burrows would be inspected to verify they are empty prior to construction activities.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act: 16 United States Code, Section 1531, et seq. See also 50 Code of Federal Regulations Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems on which they depend.

Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species.

The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of the Federal Endangered Species Act defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act, California Fish and Game Code, Section 2050, et seq. The California Endangered Species Act emphasizes early consultation to avoid potential impacts to

rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats.

The California Department of Fish and Game is the agency responsible for implementing the California Endangered Species Act. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by the California Department of Fish and Game.

For projects requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Game may also authorize impacts to the California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

California red-legged frog

Classified as a Federal Threatened Species and California Special Species of Concern, the California red-legged frog is known to occur in Coast Range watersheds from near Point Reyes to northern Baja California. These frogs inhabit still or slow water in streams, marshes, ponds, reservoirs and canals.

Of the eight potential water bodies, only three sites were surveyed. Two sites had positive documented frog sightings. The project area is not located within a critical habitat unit.

California tiger salamander

The Santa Barbara County Distinct Vertebrate Population Segment of the California tiger salamander was emergency listed by U.S. Fish and Wildlife Service as endangered in January 2000. Its distribution is limited to Santa Barbara County among six distinct regions. The Santa Rita Valley, which includes the project study area, is one of the six regions and is also the southernmost for the salamander in Santa Barbara County. The California Department of Fish and Game recently listed California tiger salamander as a threatened species under the California Endangered Species Act on March 3, 2010 (refer to Table 1.6).

Historically, vernal (natural temporary) pools were the primary breeding habitat, but now temporary and permanent ponds created for livestock watering are also used. Adults enter breeding ponds during storms, typically from November through January, breed, and return to the surrounding upland. The pools need to stay wet long enough for the larvae to transform into an adult form (also known as metamorphose), usually 10 weeks extending into April. Adults return to upland habitat for the rest of the year. The salamanders are poor burrowers and require refuges provided by ground squirrels and other burrowing mammals.

Studies conducted in 2001 and 2004 indicate that the salamanders may disperse up to 0.7 mile and have been recorded to disperse 1.3 miles from a breeding pond. The primary cause of declining California tiger salamander populations is the loss and fragmentation of habitat resulting from human activities and the encroachment of nonnative predators. Automobiles and off-road vehicles kill a significant number of migrating salamanders.

Two years of protocol-level surveys, which are required by the U.S. Fish and Wildlife Service for California tiger salamander, were conducted at eight study sites throughout the biological study area. Studies consisted of aquatic sampling and upland drift fencing along the right-of-way. The salamanders were found at five of the eight study sites.

Vernal pool branchiopods

Surveys were completed for fairy shrimp where habitat for species was accessible following the U.S. Fish and Wildlife Service interim survey guidelines. Within the project study area were two areas with standing surface water that could be potential habitat for fairy shrimp. Although 2-year protocol surveys were not done at these locations, due to a lack of ponding the second year, a long season of surveys was completed during the first season with negative results. Due to the perennial nature of the aquatic habitat and the negative survey results from the first season, it is unlikely that the project would affect vernal pool branchiopods. The U.S. Fish and Wildlife Service concurred with this determination in its Biological Opinion issued March 12, 2010 (refer to Appendix J).

Environmental Consequences

California red-legged frog

Caltrans, as assigned by the Federal Highway Administration, initiated formal Section 7 consultation with the U.S. Fish and Wildlife Service for the California red-legged

frog. The U.S. Fish and Wildlife Service issued a Biological Opinion dated March 12, 2010 (refer to Appendix J).

The project would result in long-term minimal direct and indirect impacts to California red-legged frogs. Direct impacts would include loss of upland habitat, handling of California red-legged frogs and possible incidental mortality of California red-legged frogs that may use the Caltrans right-of-way to seek shelter from construction-related activities.

Construction activities would result in temporary direct impacts to habitat that would be disturbed by equipment operation and staging. Migration and dispersal of the frog to and from breeding ponds would be impaired during construction. Temporary indirect impacts could occur as a result of sediment-laden storm runoff that may affect water quality of ponds. Implementing the stormwater measures listed in Section 2 would reduce this risk.

Work in the vicinity of the Campbell ponds would have the greatest chance of adversely affecting the California red-legged frog. This impact would be reduced by the inclusion of the minimization measures listed below, which include all measures listed in the Biological Opinion dated March 12, 2010 (refer to Appendix J).

California tiger salamander

Caltrans, as assigned by the Federal Highway Administration, initiated formal Section 7 consultation with the U.S. Fish and Wildlife Service for the California tiger salamander. The U.S. Fish and Wildlife Service issued a Biological Opinion dated March 12, 2010 (refer to Appendix J).

The project is expected to have both direct and indirect impacts on the California tiger salamander. Direct impacts would occur from loss of upland habitat and possible incidental mortality of the salamander using the Caltrans right-of-way for shelter from construction-related activities. The project would result in the reduction of native and non-native vegetation and elimination of small mammal burrows that could be used for salamanders to harbor in within the project area. Grading, paving, and other structural modification to upland habitat could cause permanent adverse impacts to these salamanders at the five locations where California tiger salamanders were documented to occur.

Widening the highway would increase the possibility of salamanders being struck by vehicles after construction at and near Tularosa Road and the Campbell ponds. The

widening could also limit the salamanders' ability to migrate between ponds and upland areas through the year. The construction of dual passing lanes adjacent to the Campbell ponds would change the highway from two lanes to four lanes, effectively, creating a barrier between the breeding ponds to the north of the highway and the upland habitat to the south.

Equipment staging and operation would create temporary, direct impacts to the salamander from disturbance of habitat and impairment of its migration and dispersal to and from breeding ponds during construction. Temporary impacts to upland habitat may be caused by equipment staging and operations that extend beyond the limits of permanent disturbance during construction. Temporary impacts to breeding habitat at the Campbell ponds would be expected from the construction of the undercrossings. The effects would include damage or removal of vegetation and destruction of small mammal burrows. Temporary, indirect impacts include any sediment-laden storm runoff during highway construction. The measures required as part of the storm water program make this impact unlikely. Impacts to the California tiger salamander would be reduced by the inclusion of the mitigation and minimization measures listed below, which include all measures listed in the Biological Opinion, dated March 12, 2010.

Avoidance, Minimization, and/or Mitigation Measures

California red-legged frog

- Only U.S. Fish and Wildlife Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of the California red-legged frog during pre-construction surveys and ongoing monitoring throughout construction of the project.
- 2. Ground disturbance would not begin until written approval is received from the U.S. Fish and Wildlife Service that the biologist is qualified to conduct the work.
- 3. Before any activities begin, the approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California red-legged frog and its habitat, the specific measures that are being implemented by the project to conserve the frog, and the boundaries within which the project may be accomplished.

- 4. The exclusionary fencing that would be installed at three locations for the California tiger salamander would also exclude frogs from entering the work site at these locations.
- 5. Construction activities would be avoided within the breeding ponds near Campbell Road when the ponds flood into the construction zone.
- 6. A U.S. Fish and Wildlife Service-approved biologist would be present at the work site until all California red-legged frogs have been removed, workers have been instructed, and disturbance of habitat has been completed. Caltrans would then designate a person to monitor on-site compliance with all minimization measures.
- 7. Minimization measures to be implemented for the salamander would also reduce potential impacts to frogs.
- Undercrossings proposed for salamanders would be designed to work for frog movement as well.
- 9. Barriers and undercrossings would be designed to accommodate the frogs and the salamanders, reducing the amount of road kill in this area for the California red-legged frog.
- 10. The number of access routes, size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Area fencing would be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frogs.

California tiger salamander

- Only U.S. Fish and Wildlife Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of the California tiger salamander.
- 2. Ground disturbance would not begin until written approval is received from the U.S. Fish and Wildlife Service that the identified biologist is qualified to conduct the work.

- 3. Before any activities begin, the approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California tiger salamander and its habitat, the specific measures that are being implemented by the project to conserve the salamanders, and the defined boundaries for the project construction.
- 4. Exclusionary fencing would be installed at the critical locations (in the vicinity of the ponds and where salamanders were present) to stop salamanders from entering the construction area. Exclusionary fence would be installed along both sides of the highway at the limits of the construction zone near the breeding ponds. The exclusionary fence may need to be relocated from the north side of the Campbell ponds as the temporary pond fills and recedes. The approved biologist would monitor installation of exclusionary fencing.
- 5. Construction activities would be avoided within the Campbell breeding ponds when the ponds flood into the construction zone.
- Prior to vegetation removal and grading activities, the approved biologist
 would survey for and relocate any California tiger salamander identified
 within potential upland habitat.
- 7. A percentage, yet to be determined, of small mammal burrows with potential salamander habitat would be hand excavated prior to construction activities by the approved biologist. Any salamanders found during hand excavation activities would be relocated the shortest distance possible, by the approved biologist, to a location that has suitable habitat and would not be affected by project activities. A rodent burrow hand excavation plan would be submitted to the U.S. Fish and Wildlife Service for approval prior to excavation activities beginning.
- 8. The approved biologist would be present at the work site until all attempts to remove salamanders are complete, workers have been instructed, and disturbance of habitat has been completed. Caltrans would then designate a monitor to ensure on-site compliance with all minimization measures.
- 9. During project activities, all trash that may attract predators would be properly contained, removed from the work site, and disposed of regularly. Following

construction, all trash and construction debris would be removed from work areas.

- 10. All refueling, maintenance, and staging of equipment and vehicles would occur at least 60 feet from riparian and pond habitat. Measures would be taken to avoid situations where a spill could drain directly toward aquatic habitat.
- 11. The project would be replanted with native riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. Erosion control measures would be implemented around newly installed amphibian undercrossing areas.
- 12. The number of access routes, size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Area fencing would be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to salamander habitat.
- 13. To control sedimentation during and after project implementation, Caltrans would implement best management practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act, for the specific project. If best management practices are ineffective, Caltrans would attempt to remedy the situation immediately, in consultation with the U.S. Fish and Wildlife Service.
- 14. To ensure that diseases are not conveyed between work sites, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force would be followed by the U.S. Fish and Wildlife Service-approved biologist at all times.
- 15. To minimize the impacts of effectively building a dispersal and migration barrier west of Campbell Road, undercrossings would be constructed beneath the facility along the entire road adjacent to both ponds. Undercrossings would consist of culverts spaced 150 feet apart. Amphibian barriers would be constructed between undercrossings to channelize salamanders to undercrossings. Adjacent to the westernmost Campbell Pond, where most adult salamanders were detected during upland surveys, a 60-foot-wide viaduct would be constructed. The undercrossings would increase the chances

of successful highway crossings for the California tiger salamander after highway widening. A series of three culvert-type undercrossings, with similar spacing, would also be installed east of Tularosa Road.

- 16. Caltrans would monitor the use and effectiveness of the amphibian undercrossings for up to five years. The details of the monitoring will be identified in an Undercrossing Monitoring Plan submitted to, and approved by the U.S. Fish and Wildlife Service prior to the completion of the undercrossing structures.
- 17. To minimize impacts to the Campbell Pond breeding ponds, the slopes on the north side of the alignment would be left at their current 2:1 slope instead of implementing the standard 4:1 slope.
- 18. California tiger salamanders have been observed on the north side of the highway and east of Hapgood Road in a willow thicket that does not hold water long enough to provide suitable breeding habitat. However, salamanders probably use the swale as a resting area during migrations and dispersal. This location would be established as an Environmentally Sensitive Area and be avoided during construction.
- 19. Design consideration would be made in areas of the project where California tiger salamanders travel to eliminate or modify structures that could potentially be a barrier to them. Items such as curbing, drainage grades, and steep-sided drainage ditches would be designed to allow salamanders to move freely.

2.3.6 Invasive Species

On February 3, 1999, President Bill Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health."

Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the National Environmental Policy Act analysis for a proposed project.

Affected Environment

A Natural Environment Study was completed for the proposed project in June 2009. Table 2.10 shows the invasive plant species that occur within the project boundaries that are on List A of the California Invasive Plant Council's Invasive Plant Inventory of greatest ecological concern in California. The list indicates that the species have severe or substantial impacts on physical processes, plant and animal communities and vegetation structure.

Table 2.10 Plants found in the Project Limits that are on the California Invasive Plant Council's Invasive Plant Inventory

Common Name	Latin Name	Common Name	Latin Name	
Giant reed	Arundo donax	Cutleaf geranium	Geranium dissectum	
onionweed	Asphodelus fistulosus	Horehound	Marrubium vulgare	
Australian saltbush	Atriplex semibaccata	California burclover	Medicago	
Slender oats	Avena barbata	Tree tobacco	Nicotiana glauca	
Wild oats	Avena fatua	Harding grass	Phalaris aquatica	
Black mustard	Brassica nigra	Bristly ox-tongue	Picris echioides	
Ripgut brome	Bromus diandrus	Smilograss	Piptatherum miliaceum	
Italian thistle	Carduus pycnocephalus	Plantain	Plantago lanceolata	
Iceplant	Carpobrotus edulis	Radish	Raphanus sativus	
Tocalote	Centaurea melitensis	Sheep sorrel	Rumex acetosella	
Poison hemlock	Conium maculatum	Curly dock	Rumex crispus	
Pampas grass	Cortaderia selloana	Peruvian peppertree	Schinus molle	
Bermuda grass	Cynodon dactylon	Salt cedar	Tamarix ramosissima	
Veldt grass	Ehrharta calycina	Cocklebur	Xanthium strumarium	
Blue gum eucalyptus	Eucalyptus globulus	Sweet fennel	Foeniculum vulgare	

Environmental Consequences

Imported and exported fill has the greatest potential to spread invasive plants. The dispersal of invasive species in the area may also be caused by maintenance operations, such as mowing or the inadvertent inclusion of invasive species in seed mixes that get applied alongside the highway.

Avoidance, Minimization, and/or Mitigation Measures

In compliance with the Executive Order on Invasive Species, Executive Order 13112, and subsequent guidance from the Federal Highway Administration, the landscaping

and erosion control included in the project would not introduce species listed as noxious weeds.

Only clean fill should be imported. Any excess soil that cannot remain on site would be disposed of in a manner that would not spread invasive plants and their seeds. If this is an extensive amount of fill, it can be modified to only include the top 6 inches of soil. Care would be taken to avoid including any species that occurs on the California Invasive Plant Council's Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project.

2.4 Cumulative Impacts

While it is not possible to analyze cumulative impacts with total accuracy, there are methods available that offer reasonable accuracy. A systematic method of cumulative impact analysis requires the following steps:

- Identify resources
- Define the study area for each resource
- Describe the current health and historical context for each resource
- Identify direct and indirect impacts from the proposed project
- Identify reasonably foreseeable projects that might impact identified resources
- Assess potential cumulative impacts
- Assess potential mitigation measures

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial, impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in

water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

Section 15130 of the California Environmental Quality Act Guidelines describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under the California Environmental Quality Act, can be found in Section 15355 of the California Environmental Quality Act Guidelines. A definition of cumulative impacts, under the National Environmental Policy Act, can be found in 40 Code of Federal Regulations, Section 1508.7 of the Council on Environmental Quality regulations.

Affected Environment

All of the resource study boundaries were determined to be within a 5-mile radius of the project area. Table 2.11 shows proposed projects in the area. Two of the listed projects were denied, but they were still included in the list because they may be reconsidered at some point in the future, in a different form.

Table 2.11 Projects Considered for Cumulative Impacts

Туре	Project Name	Description	Location	Current Status
State	SB 246 Soft Median Barrier	Install centerline buffer/rumble strips on Highway 246	Highway 246, post mile 9.6-R21.0	Construction Approved for July 2010
Private	Providence Landing	284 SFD and 72 Low- income units	South Vandenberg Village	Approved
Private	Clubhouse Estates	53 lots, 1 open space lot	Bisected by Clubhouse Drive in Vandenberg Village Country Club area	Approved
Private	La Purisima Golf Course)	80-room resort/hotel, restaurant, spa, and 80 casitas	3455 East Highway 246 at Cebada Canyon	Denied
Private	Gaffeney	Rezone Existing Developed Rural Neighborhood (EDRN) to Residential Rural-5	North of Tularosa Road/ Highway 246	Denied
State	Purisma Road Intersection Improvement Project	Construct single-lane roundabout	Intersection of Purisma Road and SR 246	Development stage
Private	PG&E	Reconductor existing Cabrillo-Santa Ynez 115kV transmission line	Between cities of Lompoc and Buellton on SR 246 (in vicinity of Campbell Road)	Development stage
County	Purisima Road	County proposes to widen the shoulder to 5 feet along Purisima Road	On Purisima Road, between Highway 246 and Highway 1	Development stage

Environmental Consequences

The proposed project could potentially contribute to the cumulative impacts of two identified resources. In reviewing the technical studies prepared for the project and looking at both the completed projects and proposed projects for the area, visual resources and one biological resource (California tiger salamander) need further analysis.

Although there haven't been many changes along this section of Highway 246 in recent years, two projects are proposed for the area in the next five years: the Purisima Road/Highway 246 Intersection Improvement Project and the Highway 246 Passing Lane Project. Visual resources in the area could be affected by these changes. However, with the recommended mitigation measures, the regional landscape could

accommodate the proposed additional pavement, earthwork, and tree removal associated with this project, without losing a substantial amount visual quality.

The greatest impact to California tiger salamander upland habitat near the project impact area in the last 20 years is the conversion of grazing land to more intensive agriculture, including row crops and vineyards. Livestock grazing is generally compatible with sustained use of upland habitat by the salamander. Conversion to intensive agriculture eliminates or greatly reduces availability of small mammal burrows that are essential as shelter for salamanders.

The proposed project includes minimization, avoidance and mitigation actions to reduce its impacts to a negligible level. Providing the extensive undercrossings at Campbell Pond and other locations would compensate for the potential direct losses, thereby eliminating any contribution to the cumulative effect.

Avoidance, Minimization, and/or Mitigation Measures

Numerous measures involving grading, landscaping, erosion control and other soil disturbance are included in the project. A detailed description of visual resources is provided in Section 2.15.

As described above and in Section 2.3.5, the combination of the viaduct and the 14 undercrossings would offset impacts to the California tiger salamander.

2.5 Climate Change under the California Environmental Quality Act

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change, the efforts devoted to greenhouse gas emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of greenhouse gases related to human activity that include carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and proactive approach to dealing with greenhouse gas emissions and climate change at the state level. AB 1493 requires the Air Resources Board to

develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards, California needed a waiver from the U.S. Environmental Protection Agency. The waiver was denied by Environmental Protection Agency in December 2007. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that the Environmental Protection Agency would reconsider its decision regarding the denial of California's waiver. On May 18, 2009, President Barack Obama announced the enactment of a 35.5-mile-per-gallon fuel economy standard for automobiles and light duty trucks that will take effect in 2012. On June 30, 2009, the EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this executive order is to reduce California's greenhouse gas emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall greenhouse gas emissions reduction goals while further mandating that the Air Resources Board create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's climate action team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and greenhouse gas reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing greenhouse gas emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency to regulate greenhouse gases as a

pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., U.S. Supreme Court No. 05–1120. 549 U.S. 497 (2007). The court ruled that greenhouse gases do fit within the Clean Air Act's definition of a pollutant, and that EPA does have the authority to regulate greenhouse gases. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting greenhouse gas emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's <u>proposed</u> greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009. ¹

Affected Environment

According to Recommendations by the Association of Environmental Professionals on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents (March 5, 2007), an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all

¹ http://www.epa.gov/climatechange/endangerment.html

past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Scoping Plan, the California Air Resources Board recently released an updated version of the greenhouse gas inventory for California (June 26, 2008). Shown below is a graph from that update that shows the total greenhouse gas emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

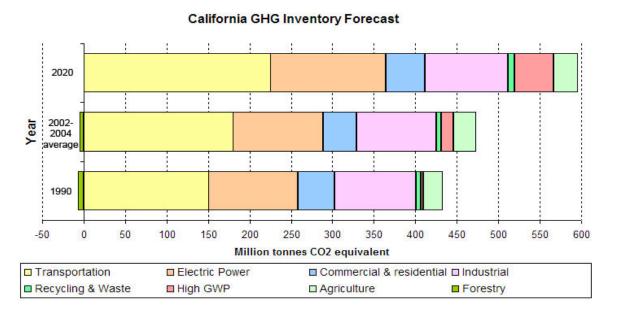


Figure 2.2 California Greenhouse Gas Inventory

Taken from: http://www.arb.ca.gov/cc/inventory/data/forecast.htm

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing greenhouse gas emissions reduction and climate change. Recognizing that 98 percent of California's greenhouse gas emissions are from the burning of fossil fuels and 40 percent of all human-made greenhouse gas emissions are from transportation (see Climate Action Program at Caltrans (Caltrans 2006)). Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006Published in December 2006, this document can be found at: http://www.dot.ca.gov/docs/ClimateReport.pdf). Transportation's contribution to greenhouse gas emissions is dependent on three factors: the types of vehicles on the road, the type of fuel the vehicles use, and the time/distance the vehicles travel.

One of the main strategies in Caltrans' Climate Action Program to reduce greenhouse gas emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0-25 miles per hour (see Figure 2.3 below).

The proposed project would relieve congestion caused by slower vehicles by adding passing lanes and left-turn pockets. Enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in greenhouse gas emissions, particularly CO₂, may be reduced.

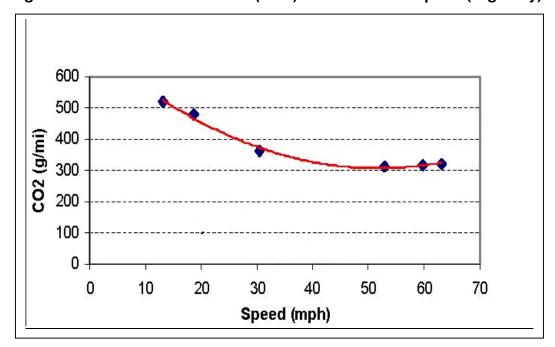


Figure 2.3 Fleet Carbon Dioxide (CO2) Emissions vs. Speed (Highway)

Source: Center for Clean Air Policy— http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20(1-13-04).pdf

Environmental Consequences

An analysis was conducted for greenhouse gases. The dominant pollutant in greenhouse gases is carbon dioxide (CO₂), which makes up more than 80 percent of these pollutants. The Emission Factor (CTEMFAC) computer model was used for estimating the amounts of pollutants generated by mobile sources. The existing and future traffic volumes and speeds, and potential greenhouse gas emissions are summarized in Table 2.12.

Table 2.12 Analysis of CO and CO₂ for SB-246 (3.75 mi.) with CTEMFAC V2.5

Cooperie	Цания	0007	0015 No DIA	0015 D.::Id	0005 No DIA	000E D.::Id
Scenario	Hours	2007	2015 No Bld	2015 Build	2035 No Bld	2035 Build
AADT		14,906	18,651	18,651	26,142	26,142
Peak Hours	5	1,319	1,611	1,611	2,194	2,194
Speeds		60	58	60	56	59
Vehicle Percents : autos (97), Trucks-3+ axles (3.0)						
Off-peak hours	19	437	558	558	799	799
Speeds		60	60	60	58	60
Vehicle Percents: auto	s (91.5), T	rucks-3+ axle	s (8.5)			
Traffic projected from D-5 Forecasting Memo 6/8/2006						
Annual Tons of CO		0.38	0.21	0.21	0.09	0.10
Appual Tapa of CO2		25 12	20.02	21.17	41.57	42.21

25.12 Annual Tons of CO2 30.83 31.17 41.57 43.31

Table 2.12 shows that the project would create slightly more greenhouse gases (CO₂) than the no-build condition. (Note: The CO and CO₂ volumes are only for the total 3.75 lane miles of highway affected by the project. This figure was derived by dividing 7.5 total lane miles of passing lanes by two in order to compare to the equivalent two-lane section of Highway 246.) The increase is due to higher predicted traffic volumes and greater speed made possible by adding two sets of passing lanes to the highway. The lowest composite emission factors for CO₂ occur at about 45-50 miles per hour. As speeds both increase and decrease from this point, emission factors for CO₂ increase. Therefore, even if the traffic volumes for the build and no-build conditions were the same, the project would still cause an apparent increase in CO₂ emissions.

The slight increase in speed accounts for the difference in predicted greenhouse gas emissions. Levels of carbon dioxide, the primary greenhouse gas, are slightly higher (1.74 tons more annually) under the build scenario. Levels of carbon monoxide are slightly higher under the build scenario (0.01 tons more annually). Carbon monoxide, long considered the primary indicator of air quality, shows a steady decrease in concentrations between the current and design year. Since the project is included in the county's transportation program, short-term construction emissions from the proposed project are accounted for.

With the current science, project-level analysis of greenhouse gas emissions is limited. There are numerous key greenhouse gas variables that are likely to change dramatically during the design life of the proposed project and would thus dramatically change the projected CO₂ emissions.

First, vehicle fuel economy is increasing. The Environmental Protection Agency's annual report, *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008* (http://www.epa.gov/oms/fetrends.htm), which provides data on the fuel economy and technology characteristics of new light-duty vehicles including cars, minivans, sport utility vehicles, and pickup trucks, confirms that average fuel economy, has improved each year beginning in 2005, and is now the highest since 1993.

Most of the increase since 2004 is due to higher fuel economy for light trucks, following a long-term trend of slightly declining overall fuel economy that peaked in 1987. These vehicles also have a slightly lower market share, peaking at 52 percent in 2004, with projections at 48 percent in 2008.

Table 2.13 Required Miles Per Gallon by Alternative

2015 Required Miles Per Gallon (mpg) by Alternative							
No-Build	I	25% Below Optimized	Optimized (Preferred)	25% Above Optimized	50% Above Optimized	Total Costs Equal Total Benefits	Technology Exhaustion
Cars	27.5	33.9	35.7	37.5	39.5	43.3	52.6
Trucks	23.5	27.5	28.6	29.8	30.9	33.1	34.7

Table 2.13 shows the alternatives for vehicle fuel economy increases currently being studied by the National Highway Traffic Safety Administration in its Draft Environmental Impact Statement for New Corporate Average Fuel Economy Standards (June 2008).

Second, near zero carbon vehicles will come into the market during the design life of this project. According to a March 2008 report released by University of California Davis, Institute of Transportation Studies:

"Large advancements have occurred in fuel cell vehicle and hydrogen infrastructure technology over the past 15 years. Fuel cell technology has progressed substantially resulting in power density, efficiency, range, cost, and durability all improving each year. In another sign of progress, automotive developers are now demonstrating over 100 fuel cell vehicles in California – several in the hands of the general public – with configurations designed to be

attractive to buyers. Cold-weather operation and vehicle range challenges are close to being solved, although vehicle cost and durability improvements are required before a commercial vehicle can be successful without incentives. The pace of development is on track to approach pre-commercialization within the next decade.

"A number of the U.S. Department of Energy 2010 milestones for fuel cell vehicles development and commercialization are expected to be met by 2010. Accounting for a five to six year production development cycle, the scenarios developed by the U.S. DOE suggest that 10,000s of vehicles per year from 2015 to 2017 would be possible in a federal demonstration program, assuming large cost share grants by the government and industry are available to reduce the cost of production vehicles."

Third and as previously stated, California has recently adopted a low-carbon transportation fuel standard. The California Air Resources Board is scheduled to come out with draft regulations for low-carbon fuels in late 2008 with implementation of the standard to begin in 2010.

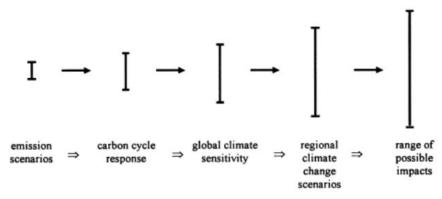
Fourth, driver behavior has been changing as the U.S. economy and oil prices have changed. In its January 2008 report, *Effects of Gasoline Prices on Driving Behavior and Vehicle Market*, http://www.cbo.gov/ftpdocs/88xx/doc8893/01-14-GasolinePrices.pdf the Congressional Budget Office found the following results based on data collected from California: 1) freeway motorists have adjusted to higher gas prices by making fewer trips and driving more slowly; 2) the market share of sports utility vehicles is declining; and 3) the average prices for larger, less-fuel-efficient models have declined over the past five years as average prices for the most-fuel-efficient automobiles have risen, showing an increase in demand for the more fuel-efficient vehicles.

Taken from pp. 3-48 and 3-49 of the National Highway Traffic Safety Administration Draft Environmental Impact Statement for New Corporate Average Fuel Economy Standards (June 2008), Figure 2.4 illustrates how the range of uncertainties in assessing greenhouse gas impacts grows with each step of the analysis:

"Cascade of uncertainties typical in impact assessments showing the "uncertainty explosion" as these ranges are multiplied to encompass a comprehensive range of future consequences, including physical, economic, social, and political impacts and policy responses."

² Cunningham, Joshua, Sig Cronich, Michael A. Nicholas. March 2008. *Why Hydrogen and Fuel Cells are Needed to Support California Climate Policy*, UC Davis, Institute of Transportation Studies, pp. 9-10.

Figure 2.4 Cascade of Uncertainties



Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in greenhouse gas emission levels, including carbon dioxide, at the project level is not currently possible. No federal, state, or regional regulatory agency has provided methodology or criteria for greenhouse gas emissions and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific- or regulatory-based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

Much of the uncertainty in assessing an individual project's impact on climate change surrounds the global nature of the climate change. Even assuming that the target of meeting the 1990 levels of emissions is met, there is no regulatory framework in place that would allow for a ready assessment of what the modeled 11.4- to 20.9-ton increase in CO₂ emissions would mean for climate change given the overall California greenhouse gas emissions inventory of approximately 430 million tons of CO₂ equivalent. This uncertainty only increases when viewed globally.

The IPCC has created multiple scenarios to project potential future global greenhouse gas emissions as well as to evaluate potential changes in global temperature, other climate changes, and their effect on human and natural systems. These scenarios vary in terms of the type of economic development, the amount of overall growth, and the steps taken to reduce greenhouse gas emissions. Non-mitigation IPCC scenarios project an increase in global greenhouse gas emissions by 9.7 up to 36.7 billion metric tons CO₂ from 2000 to 2030, which represents an increase of between 25 and 90 percent.³

³ Intergovernmental Panel on Climate Change (IPCC). February 2007. Climate Change 2007: The Physical Science Basis: Summary for Policy Makers. http://www.ipcc.ch/SPM2feb07.pdf.

The assessment is further complicated by the fact that changes in greenhouse gas emissions can be difficult to attribute to a particular project because the projects often cause shifts in the locale for some type of greenhouse gas emissions, rather than causing "new" greenhouse gas emissions. Although some of the emission increases might be new, a net global increase, reduction, or no change, is uncertain and there are no models approved by regulatory agencies that operate at the global or even statewide scale.

The complexities and uncertainties associated with project-level impact analysis are further borne out in the recently released draft environmental impact statement completed by the National Highway Traffic Safety Administration Corporate Average Fuel Economy standards, June 2008. As the text quoted below shows, even when dealing with greenhouse gas emission scenarios on a national scale for the entire passenger car and light truck fleet, the numerical differences among alternatives is very small and well within the error sensitivity of the model.

"In analyzing across the Corporate Average Fuel Economy 30 alternatives, the mean change in the global mean surface temperature, as a ratio of the increase in warming between the B1 (low) to A1B (medium) scenarios, ranges from 0.5 percent to 1.1 percent. The resulting change in sea level rise (compared to the No Action Alternative) ranges, across the alternatives, from 0.04 centimeter to 0.07 centimeter. In summary, the impacts of the MY 2011-2015 Corporate Average Fuel Economy alternatives on global mean surface temperature, sea level rise, and precipitation are relatively small in the context of the expected changes associated with the emission trajectories. This is due primarily to the global and multi-sectoral nature of the climate problem. Emissions of CO₂, the primary gas driving the climate effects, from the United States automobile and light truck fleet represented about 2.5 percent of total global emissions of all greenhouse gases in the year 2000 (EPA, 2008; CAIT, 2008). While a significant source, this is a still small percentage of global emissions, and the relative contribution of CO₂ emissions from the United States light vehicle fleet is expected to decline in the future, due primarily to rapid growth of emissions from developing economies (which are due in part to growth in global transportation sector emissions)." [NHTSA Draft Environmental Impact Statement for New Corporate Average Fuel Economy Standards, June 2008, pp.3-77 to 3-78]

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction green house gas emissions include those produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from

traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the green house gas emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

Based on the above, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding the project's direct impact and its contribution on the cumulative scale to climate change. As previously stated, Caltrans does anticipate an increase in greenhouse gas emissions with the project. Caltrans is taking measures to help reduce energy consumption and greenhouse gas emissions both at the program level and at the project level. These measures are outlined in Table 2.14 in the following section.

AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as the California Air Resources Board works to implement the Governor's executive orders and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$238.6 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding through 2016.

As shown in Figure 2.5, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in greenhouse gas emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

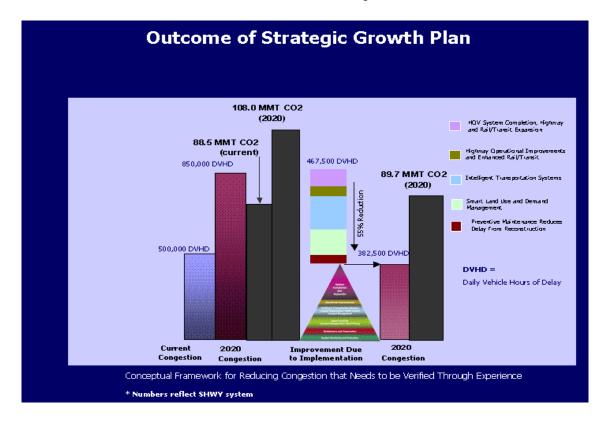


Figure 2.5 Outcome of Strategic Growth Plan

As part of the Climate Action Program at Caltrans (December 2006, http://www.cot.ca.gov/docs/ClimateReport.pdf), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority.

Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting ongoing research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the EPA and California Air Resources Board hold the control of the fuel economy standards.

Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the University of California at Davis.

Table 2.14 summarizes the Department and statewide efforts that Caltrans is implementing in order to reduce greenhouse gas emissions.

For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf.

Table 2.14 Caltrans Statewide Efforts to Reduce Greenhouse Gas Emissions

Strategy	Program	Partnership	Method/Process	Estimated CO ₂ Savings Million Metric Tons (MMT)		
				2010 2020		
Smart Land Use	Inter-governmental relations (IGR)	Lead: Caltrans Partner: Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated	
	Planning Grants	Lead: Caltrans Partner: Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated	
	Regional Plans and Blueprint Planning	Lead: Regional Agencies Partner: Caltrans	Regional plans and application process	0.975	7.8	
Operational Improvements and Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Lead: Caltrans Partner: Regions	State ITS; Congestion Management Plan	.007	2.17	
Mainstream Energy and GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Env. Analysis	Interdepartmental effort	Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated	
Educational and Information Program	Office of Policy Analysis & Research	Partner: Interdepartmental, CalEPA, CARB, CEC	Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated	
Fleet Greening and Fuel Diversification	Division of Equipment	Department of General Services	Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225	
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team	Energy Conservation Opportunities	0.117	.34	
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries	2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	3.6	
Goods Movement	Office of Goods Movement	CalEPA, CARB, BT&H, MPOs	Goods Movement Action Plan	Not Estimated	Not Estimated	
Total				2.72	18.67	

BT&H = Business, Transportation and Housing Agency. CalEPA = California Environmental Protection Agency. CARB = California Air Resources Board. CEC = California Energy Commission. IGR = Inter-governmental relations. ITS = Intelligent Transportation System. MMT = million metric tons MPOs = Metropolitan Planning Organizations.

Chapter 2 • Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

To the extent that it is applicable or feasible for the project, the following measures can also help to reduce the greenhouse gas emissions and potential climate change impacts from projects:

- 1. Use of reclaimed water—currently 30 percent of the electricity used in California is used for the treatment and delivery of water. Use of reclaimed water helps conserve this energy, which reduces greenhouse gas emissions from electricity production.
- 2. Landscaping—reduces surface warming and through photosynthesis decreases carbon dioxide.
- 3. Portland cement—use of lighter color surfaces such as Portland cement helps to reduce the albedo effect (measure of how much light a surface reflects) and cool the surface; in addition, Caltrans has been a leader in the effort to add fly ash to Portland cement mixes. Adding fly ash reduces the greenhouse gas emissions associated with cement production; it also can make the pavement stronger.
- 4. Lighting—Use of energy-efficient lighting, such as LED traffic signals.
- 5. Idling restrictions—for trucks and equipment.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. These activities help determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings, and a public information meeting. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Public Meetings

Public Scoping Meeting/Open House, 4:00-8:00 p.m., Wednesday, July 16, 2008
The meeting was held in the Lompoc City Council Chambers at 100 Civic Center Plaza in Lompoc and was sponsored by the City of Lompoc, Santa Barbara County, Santa Barbara County Association of Governments, and Caltrans. (Note: Information was also provided for the safety project known as the Purisima Road Intersection Improvement Project, which was split from this project in Fall 2008.)
The meeting was publicly noticed in the local newspaper (*Lompoc Record*) and announced through press releases and direct mailing lists.

Displays and handouts at the meeting described the project components, alternatives being studied, potential impacts, project schedule and funding, and the environmental process, including opportunities for public input. The meetings included formal presentations by project staff representing the three sponsor agencies, a question and answer session, opportunity for public comment, and informal contact with various staff with expertise on subjects such as roadway design, right-of-way, traffic analysis, flooding/drainage, hazardous waste, and environmental analysis. After the July 16, 2008 meeting, there was an article in the *Lompoc Record*.

The public information meeting was well attended, attracting about 80 visitors. The majority of the attendees were property owners along the 246 corridor. The following feedback was received from those who attended:

- Many attendees were resistant to the idea of passing lanes because of the lanes' potential for increasing speeds throughout the corridor.
- Many attendees raised concerns about sight distance at Tularosa Road. Caltrans received positive comments about lowering the grade at this intersection to correct this situation.
- Someone mentioned the rise in elevation at Drum Canyon Road, which obscures the sight distance to oncoming traffic.
- Many attendees were in favor of the left-hand-turn pocket proposal, especially at Tularosa Road. There was also an expressed interest in additional left-hand-turn pockets at other locations, including some private drives. A few residents expressed concern when discussion included the fact that leftturn opportunities would be reduced in areas within the passing lanes.
- Many who live off the roads leading to the highway have expressed concerns about access onto the highway in the event speeds increase. One person commented that we should redirect traffic to Mission Gate Road. Another person suggested we close Purisima Road.
- Public Hearing, 5:30 7:30 p.m., Wednesday, September 2, 2009

 The meeting was held in the Lompoc City Council Chambers at 100 Civic Center Plaza in Lompoc. The Notice of Intent to Adopt a Mitigated Negative Declaration along with a public hearing announcement was published twice in the local newspaper (*Lompoc Record*) on Sunday, August 17, 2009 and Wednesday, August 26, 2009. The notice was also mailed to a list of stakeholders that included both governmental offices and private citizens who live along the corridor and surrounding areas.

Displays and handouts were available at the meeting, which included a formal presentation. Once the presentation concluded, Caltrans staff was available for more detailed questions. Approximately 70 people attended the meeting. A court reporter was provided to take public comment.

The environmental document was available for public review at the Lompoc Public Library, the Buellton Public Library, the Caltrans District Office in San Luis Obispo and on the Caltrans website. Comments on the document varied widely. Some people supported the project with a few suggested revisions, while other expressed a preference for widening the entire 11-mile stretch to four lanes. Others questioned whether the project was necessary, especially given the tough economic situation coupled with the project's high price tag.

The following number of comments were received: State Agencies – 1; Local Governments – 3; Individuals – 4; Comment Cards – 6; Transcripts from Public Hearing – 6.

Web-based Information

The following websites have continuously provided updated information for the project: Caltrans, District 5 and the Santa Barbara County Association of Government website provides a link to the Caltrans website: www.dot.cagov/dist05/projects/lompoc246.index.htm

Project Development Team Meetings

The project development team includes members from the Lompoc Public Works Department, the Lompoc Mayor's office, the Santa Barbara County Public Works Department, and Santa Barbara County Association of Governments working together with Caltrans professionals (engineers, planners and technical specialists). Opportunities to meet occurred several times during the last three years. The meetings are intended to communicate progress made on the project and make important decisions about the project. The full project development team met on the following dates:

- May 25, 2006 (Project Kick-off Meeting after project was shelved for two years)
- December 7, 2006
- January 18, 2007
- June 6, 2007
- October 2, 2007 (Build Alternative was selected)
- May 13, 2008
- October 7, 2008
- May 6, 2009
- October 14, 2009
- March 9, 2010

Resource Agency Coordination

Biological

Ongoing telephone conversations and field meetings have occurred during the last two years with the U.S. Fish and Wildlife Service (USFWS). The focus of the correspondence has been on the California tiger salamander (the salamander), but has also included discussion of California red-legged frogs (the frog). Meetings of special note are:

- October 25, 2007 Meeting occurred between the Caltrans biologist and U.S. Fish and Wildlife Service biologist. The U.S. Fish and Wildlife Service staff directed Caltrans to perform protocol-level surveys for the salamanders and the frogs. This decision was critical because it was a higher level of studies than Caltrans staff had anticipated. The basis for the U.S. Fish and Wildlife Service's decision was to enable its staff to complete its analysis during the Section 7 formal consultation process with the best scientific information available.
- May 11, 2008 Caltrans staff and a Caltrans consultant met with the U.S. Fish and Wildlife Service's biologist at the project site to review the results of studies to date along with the current project design.
- May 14 Oct 8, 2008, Caltrans biologist and U.S. Fish and Wildlife Service's biologist coordinated on various occasions to design a feasible and effective amphibian undercrossing design for the portion of the new facility that would be constructed adjacent to the Campbell ponds.
- April 2, 2009 Caltrans biologist, Caltrans consultant and the U.S. Fish and Wildlife Service's biologist discussed results of the second season salamander upland drift fence surveys and potential minimization measures (including undercrossings) for the project.
- April 23, 2009 Caltrans biologist, Caltrans consultant and the U.S. Fish and Wildlife Service's biologist met at the project site to review the proposed undercrossing locations.
- March 12, 2010 A Biological Opinion (based on Caltrans formal request received on October 15, 2009) was issued by U.S. Fish and Wildlife Service. Refer to Appendix J.

Cultural Resources

Caltrans completed a Historic Property Survey Report and supporting technical documents in December 2008 and submitted them to the State Office of Historic Preservation on December 16, 2008. On February 9, 2009, the State Historic Preservation Officer concurred with the eligibility determinations documented in the Historic Property Survey Report.

On August 15, 2007, a Caltrans archaeologist sent a letter to the Native American Heritage Commission requesting a search of the commission's files to determine if any locations within the project area are of importance to Native Americans. The Native American Heritage Commission sent a letter to Caltrans on August 21, 2007 stating the Commission's files failed to indicate the presence of Native American cultural resources in the immediate project area.

Consultation with interested Native American representatives included exchanging letters and telephone calls, sending progress reports and copies of cultural resource reports and holding meetings with representatives of the Chumash community.

Chapter 4 List of Preparers

This document was prepared by the following Caltrans Central Region staff:

- Appelbaum, Dan, PE, Transportation Engineer. B.S., Engineering, Worcester Polytechnic Institute, Massachusetts; 20 years of transportation engineering experience. Contribution: Prepared the Preliminary Geotechnical Recommendation Report.
- Carr, Robert, Associate Landscape Architect. B.S., Landscape Architecture,
 California Polytechnic State University, San Luis Obispo; 20 years of
 experience preparing Visual Impact Assessments. Contribution: Prepared the
 Visual Impact Assessment.
- Fowler, Matt C., Senior Environmental Planner. B.A., Geographic Analysis, San Diego State University; 8 years of experience in environmental planning. Contribution: Edited and oversaw preparation of Initial Study/Environmental Assessment.
- Gokal, Apurva N., P.E., Project Engineer. B.S., Civil Engineering, California State Polytechnic University, Pomona; 13 years of engineering design experience. Contribution: Prepared the Draft Project Report.
- Hoffmann, Yvonne, Associate Environmental Planner. B.S., Natural Resources Planning, Humboldt State University; 9 years of experience preparing environmental documentation and 12 years of experience in city planning. Prepared the Initial Study/Environmental Assessment.
- Inkrott, Kristen, P.E., Civil Engineer. B.S., Environmental Engineering, California Polytechnic State University, San Luis Obispo; 8 years of experience in Caltrans Hydraulics/Floodplain Studies. Contribution: Prepared the Location Hydraulic Study and the Floodplain Evaluation Report and Summary.
- Kiaha, Krista; Associate Environmental Planner Archaeologist. M.S., Anthropology, Idaho State University; B.A. Anthropology, University of California, Santa Cruz; 14 years of experience in California, Great Basin and Pacific Island prehistoric archaeology. Contribution: Prepared Historic Properties Survey Report.

- Levulett, Valerie A., Senior Environmental Planner. Ph.D., Anthropology, University of California, Davis; 38 years of experience in cultural resource studies and environmental analysis. Contribution: Oversight of technical reports (air, noise, water, hazardous waste, and cultural resources).
- Leyva, Isaac, Engineering Geologist. B.S., Geology; 20 years of experience in petroleum geology, environmental, geotechnical engineering. Contribution: Initial Site Assessment for Hazardous Materials and Water Quality Technical Report.
- Karl J. Mikel, Transportation Engineer. B.S., Environmental Engineering, California Polytechnic University, San Luis Obispo; M.S., Civil and Environmental Engineering, California Polytechnic University, San Luis Obispo; 7 years of experience in environmental engineering. Contribution: Prepared air quality and noise reports.
- Mills, Wayne, Transportation Engineer. B.A., Earth Science, California State University, Fullerton; B.A., Social Science, San Diego State University; 24 years of air quality, noise, and paleontology studies experience. Contribution: Prepared air quality, noise, and paleontology technical reports.
- Strohl, Virginia, Biologist. B.A., Biology, Fresno State University; over 11 years of experience in environmental planning/biological studies. Contribution:

 Prepared the Natural Environment Study and Biological Assessment.
- Wheeler, Tom, Associate Environmental Planner Archaeologist. M.A., Anthropology, California State University, Sacramento; 45 years of experience in California prehistoric and historic archaeology; Contribution: Prepared the Historic Property Survey Report.
- Yu, Bing, Transportation Engineer. B.S., Civil Engineering, California Polytechnic University, San Luis Obispo; 6 years of experience in traffic engineering. Contribution: Traffic Operational Analysis.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		\boxtimes		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

II. AGRICULTURE AND FOREST RESOURCES: In

determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			\boxtimes	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				
e) Create objectionable odors affecting a substantial number of people?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				\boxtimes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				\boxtimes
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes
d) Disturb any human remains, including those interred outside of formal cemeteries?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	
VI. GEOLOGY AND SOILS: Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?					
ii) Strong seismic ground shaking?			\boxtimes		
iii) Seismic-related ground failure, including liquefaction?			\boxtimes		
iv) Landslides?			\boxtimes		
b) Result in substantial soil erosion or the loss of topsoil?					
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?					
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?					
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?					
VII. GREENHOUSE GAS EMISSIONS: Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?			\boxtimes	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			
f) Otherwise substantially degrade water quality?		\boxtimes	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?			
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			
j) Inundation by seiche, tsunami, or mudflow			
X. LAND USE AND PLANNING: Would the project:			
a) Physically divide an established community?			\boxtimes
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			
XI. MINERAL RESOURCES: Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			\boxtimes	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				\boxtimes

Police protection?		
Schools?		
Parks?		
Other public facilities?		
XV. RECREATION:		
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?		
XVI. TRANSPORTATION/TRAFFIC: Would the project:		
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		
e) Result in inadequate emergency access?		
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?		\boxtimes

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g) Comply with federal, state, and local statutes and regulations related to solid waste?				
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

Appendix B SHPO Concurrence Letter

STATE OF CALIFORNIA - THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

Reply To: FHWA081217A

OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION P.O. BOX 942896

P.O. BOX 942896 SACRAMENTO, CA 94296-0001 (916) 653-6624 Fax: (916) 653-9824 calshpo@onp.parks.ca.gov www.ohp.parks.ca.gov

February 9, 2009

Valerie Levulett Chief, Central Coast Technical Studies Branch Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401-5415

Re: Determinations of Eligibility and Finding of No Historic Properties Affected for the Highway 246 Passing Lanes Project, Santa Barbara County, CA

Dear Ms. Levulett:

Thank you for consulting with me about the subject undertaking in accordance with the Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA).

The California Department of Transportation (Department) proposes improvements to Highway 246 in Santa Barbara County. The improvements include constructing two sets of passing lanes in each direction varying in length from 1.4 miles to 2.2 miles. Additionally, intersection improvements consisting of left-turn channelization at six locations within the project limits will be constructed. A continuous left-turn channelization lane would be constructed between Hapgood Road and Big Ranch Road.

The Department is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, that the following properties are not eligible for inclusion on the National Register of Historic Places:

- Valla Dairy, East Highway 246, Lompoc
- Louis D. Streeter Farm, 5180 East Highway 246, Lompoc
- Viera Dairy Farm, 6480 East Highway 246, Lompoc
- Domingos Dairy Farm, 6700 East Highway 246, Lompoc

The project area also contains a prehistoric lithic scatter (CA-SBA-2687). The Department determined that the construction of the old Highway 246, erosion control activities, power pole emplacement, the construction and maintenance of a concrete culvert, and the construction of a paved private drive, have "severely impaired" the integrity of the site. In December of 1994, I determined that the site was ineligible for inclusion on the National Register of Historic Places (NRHP).

Page 2 of 2 FHWA081217A

One resource (CA-SBA-3623H), an abandoned mid-twentieth century local access road, is exempt under Attachment 4 of the PA.

Based on my review of the submitted documentation, I agree with your eligibility determinations regarding the above-referenced resources and concur that the project as described will not affect historic resources.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist or Tristan Tozer of my staff at (916) 654-0631 (Natalie) or (916) 653-8920 (Tristan) or e-mail at nlindquist@parks.ca.gov and tozer@parks.ca.gov.

Sincerely, Susaw K Stratton for

Milford Wayne Donaldson, FAIA

California State Historic Preservation Officer

Appendix C Visual Simulations





This viewpoint shows the area of the project that has the greatest amount of earthwork.



PHOTO-SIMULATION
WEST OF TULAROSA ROAD LOOKING EASTBOUND
OV-1
Figure 1

Appendix C • Visual Simulations





This viewpoint is typical of many of the flatter portions of the project corridor.

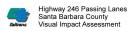


PHOTO-SIMULATION WEST OF HAPGOOD ROAD LOOKING EASTBOUND OV-2 Figure 2

Appendix D Floodplain Maps

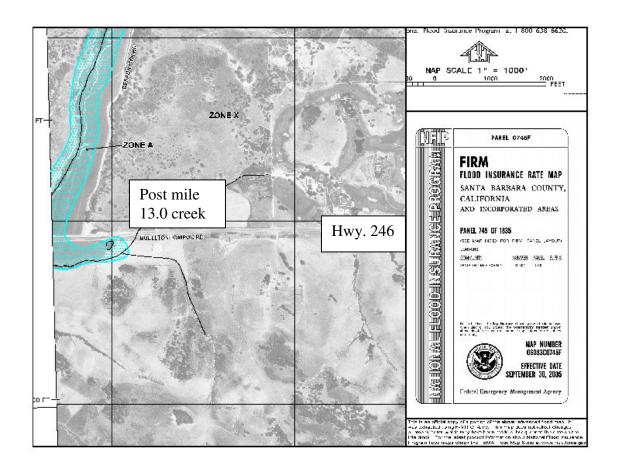


Figure D.1 Unnamed Creek at PM 13.0: Community #060331, Panel 0745F

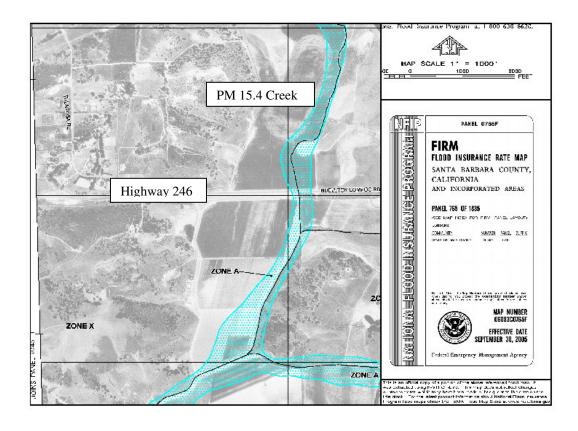


Figure D.2 Unnamed Creek at PM 15.4: Community #060331, Panel 0765F

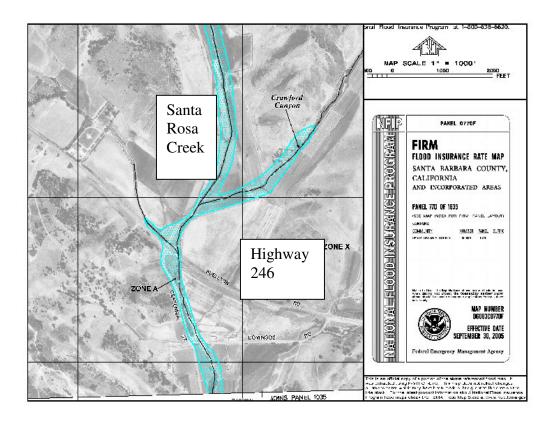


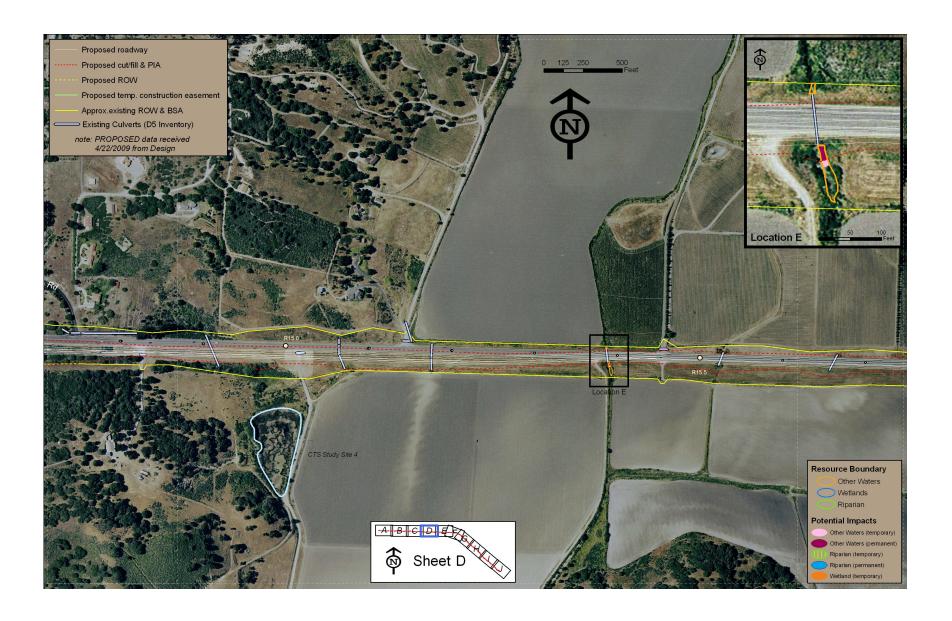
Figure D.3 Santa Rosa Creek, Community #060831, Panel 0770F

Appendix E Mapping for Wetlands and Other Waters

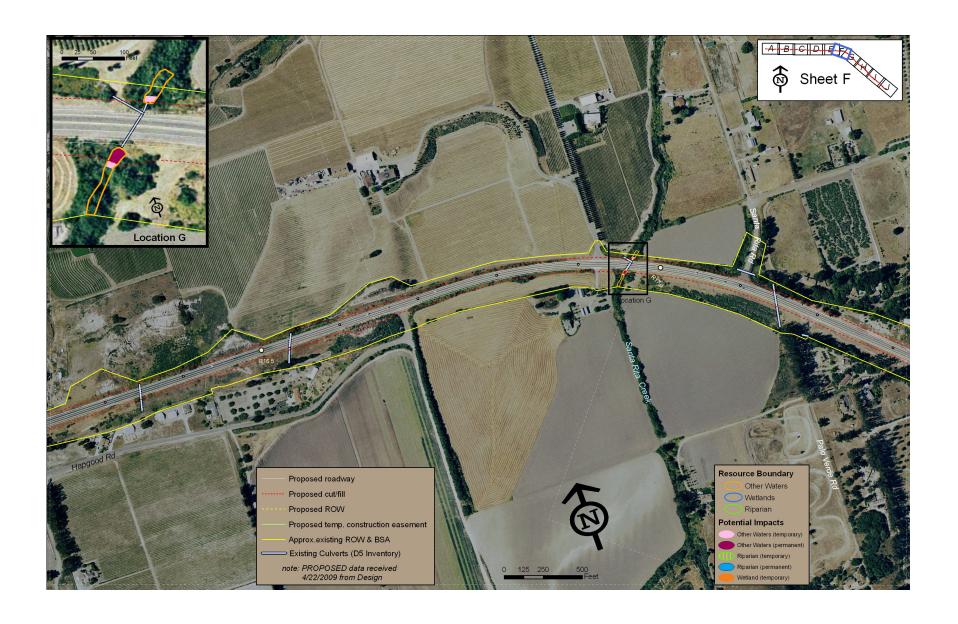




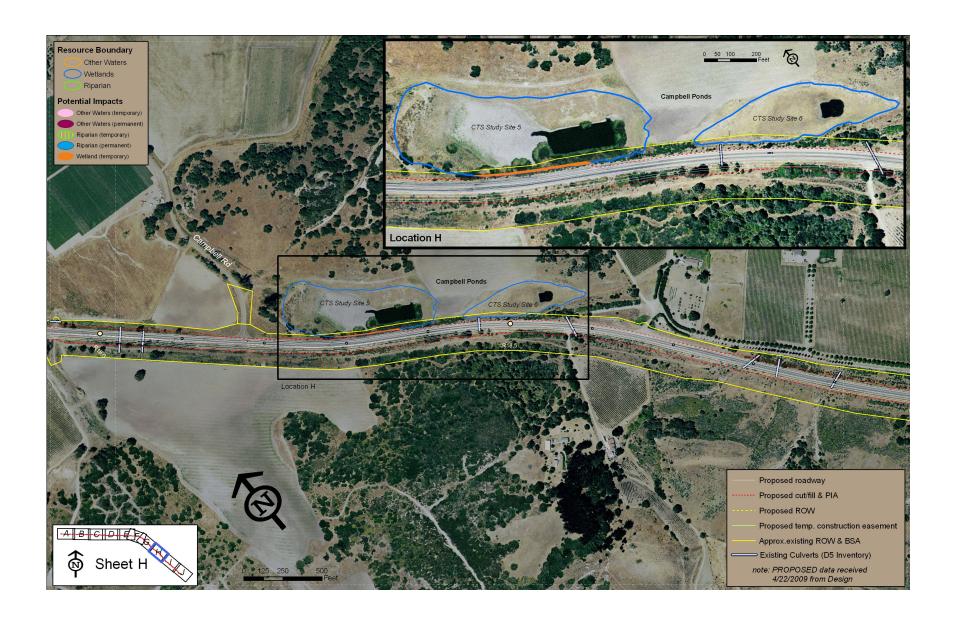
















Appendix F Title VI Policy Statement

SPATE OF CALIFORNIA BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Gesomer

DEPARTMENT OF TRANSPORTATION OFFICE OF THE DIRECTOR 1126 N STREET P. O. BOX 942873 SACRAMENTO, CA. 94273-0001 PIICNE (916) 654-5266 FAX. (916) 654-6608

TTY (916) 653-4086



August 25, 2009

TITLE VI POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

RANDELL II. IWASAKI

Director

"Caltrain improves mobility across Sulfornia"

Appendix G Minimization and/or Mitigation Summary

The shaded boxes reflect commitments that are identified as mitigation.

Section Number Reference & Resource 2.1.3	Minimization and Mitigation Commitments No impacts to the waterline are anticipated. If conflicts arise during the
Utilities/ Emergency	design phase, Caltrans would work with the Central Coast Water Authority to ensure a smooth process.
Services	
2.1.5 Traffic and Transportation/ Pedestrian and Bicycle Facilities	 A Traffic Management Plan would be finalized and put into place to minimize delay and inconvenience to motorists and bicyclists. This would include a public outreach program, which typically consists of public service announcements, prior to start of work and continued through the life of the project. Other measures may include; a. COZEEP (Construction Zone Enhanced Enforcement Program) b. Highway Advisory Radio c. Portable changeable message signs Establish ongoing coordination with local bicycle groups who use the Highway 246 corridor. Efforts would be made to maintain bicycle access during construction or establish a reasonable detour option.
2.1.6 Visual/ Aesthetics	 The project would save as many trees as possible, including native and non-native species through means such as slope warping, tree wells, etc. All trees that could not be saved would be replaced. To account for plant mortality and growth rates, a minimum-planting ratio of 10:1 would be used. Native replacement trees would be used. Trees would be replanted as close as possible to where trees were removed, including the area on and near the proposed large cut slopes and benches near Tularosa Road. Planting would include a minimum of a one-year plant establishment period.

0	
	3. All excavated slopes would include slope rounding and landform grading as appropriate to reduce their engineered appearance and to visually blend with the natural topography of the region.
	4. Where the highway would be realigned to the south near Tularosa Road, the existing roadway asphalt, road base, and sub grade would be removed. The surface of the remaining earth would be broken up and loosened (scarified) to create a better planting medium.
	Erosion control seed mixes would include a native shrub component.
2.2.2 Water Quality and Storm Water Runoff	 Staging areas for construction equipment, stockpiles, etc., would be located in upland locations at least 100 feet from all waterways, wetlands and riparian areas.
	2. The proposed project would be designed and constructed to avoid direct discharge into the watershed as much as possible by avoiding and minimizing temporary and permanent disturbances to existing wetlands and riparian corridors. Where temporary disturbances to wetlands and riparian corridors are unavoidable, reasonable measures to maintain the original grade and soil characteristics would be implemented to prevent permanent wetland loss.
	3. To address a location where there's standing water at the base of a slope, an under drain would be installed on the northerly side of the highway between Station 262+00 and Station 270+00 (Stationing is the conventional measurement system used in highway design). This drain would prevent ground water from saturating the roadway.
	4. Categories of best management practices that address temporary construction site impacts include temporary soil stabilization, temporary sediment control, wind erosion, tracking control, non-storm water management, waste management and temporary construction of features. Site storm water best management practices would be implemented to minimize or eliminate chemical

releases to ground and surface waters. A sampling and analysis

plan for non-visible pollutants would be included in the Storm Water Pollution Prevention Plan for the project. 5. Because the proposed project would create more than one acre of new impermeable surface, permanent best management practices are required. During a Caltrans staff survey of the project limits to identify appropriate areas to treat storm water, the team concurred that the rural nature of the project area and the available state rightof-way make it easy to maintain existing vegetation that can function as bio-swales. When the treatment measures are finalized during the design phase, the bio-swales will be located so as to avoid sensitive habitats such as wetlands and areas containing sensitive species. 6. Hydrology – The project will minimize storm water runoff rates and volumes by encouraging sheet flow, preserving vegetation, minimizing impervious surfaces, and encouraging the temporary storage and infiltration of storm water within the right-of-way. 1. All new cut slopes and embankments would have slope angles of 2:1 or flatter. Cut slopes greater than 30 feet in height would be interrupted at mid slope by benches. Paved ditches would be incorporated into the benches to convey run-off from the slopes above. 2. A comprehensive revegetation and erosion control plan would be incorporated into the design. Where appropriate, slopes will be minimized and rounding will be implemented. Disturbed areas will 2.3.3 receive a compost layer and hydroseeded with a native seed mix Geology/Soils/ appropriate to the region. Seismic/ Topography 3. New embankments and areas where embankments would be widened would be constructed with slopes of 2:1 or flatter. Steeper slopes, up to 1.5:1, are feasible if the embankments are constructed of select material conforming to acceptable, defined specifications. If select material is not available from local sources, it is recommended that the steeper embankments be reinforced with geogrid fabric; a product used for stabilizing soils.

2.2.4 Hazardous Waste or Materials

- 1. If thermoplastic painted stripe containing lead were encountered, appropriate Caltrans special provisions would be added to the project to handle the disposal.
- 2. If treated wood were encountered, appropriate Caltrans special provisions would be added to the project to address its disposal.
- 3. If asbestos were encountered, appropriate Caltrans special provisions would be added to the project for handling its disposal.

2.2.5 Air Quality

Implementation of the following measures would reduce any air quality impacts resulting from construction activities:

The construction contractor would comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications (1999). Section 7, "Legal Relations and Responsibility," addresses the contractor's responsibility on many items of concern, such as air pollution; protection of lakes, streams, reservoirs, and other water bodies; use of pesticides; safety; sanitation; convenience of the public; and damage or injury to any person or property as a result of any construction operation. The provisions of Caltrans Standard Specifications, Section 7-1.0F (Air Pollution Control) requires the contractor to comply with SBCAPCD rules, ordinances, and regulations. These requirements include daily watering of all areas disturbed by construction activities. State Health and Safety Code requires the contractor to prevent visible dust from leaving the construction site. Examples of measures to be used include:

- Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions.
- Spread soil binder on any unpaved roads used for construction purposes and on all construction-parking areas.
- Develop a special dust control plan documenting appropriate dust suppression methods, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.

2.3.1 Natural Communities	The project would designate environmentally sensitive areas to minimize oak woodland and oak tree impacts. The final project plans would delineate environmentally sensitive areas around the drip lines of all oak trees that the project would not remove within the proposed rights-of-way and temporary construction easements.
	For all oak trees with a diameter larger than 6 inches at breast height, Caltrans would plant ten oak trees (one gallon size) for each tree removed. Based on these ratios, a total of 1070 oak trees would be planted in unaffected habitat within the project.
2.3.2 Wetlands and Other Waters	 Originally the project was designed with the current Caltrans standard of 4:1 cut-and-fill slopes for the entire alignment. These initial designs would have filled an ephemeral vernal pool located east of Tularosa Road and south of the alignment. Also, long segments of several ephemeral drainages that run parallel to the alignment would have been filled. An exception from the Caltrans design standards was approved August 6, 2009. This exception reduces the cut-and-fill slopes from 4:1 to 2:1 for two segments of the new alignment:

	wetlands will occur at the fringe of the Campbell Ponds. This area will be restored to original contours after construction activities and left to naturalize from the plentiful wetland vegetation that occurs around the remainder of the undisturbed pond. All areas beyond the minimum required for construction would be off limits to construction activities. 3. Environmental Sensitive areas will be identified on the plans to avoid any equipment storage or staging in riparian areas. All storage/ stockpile areas would be located in uplands. 4. A Storm Water Prevention Plan would be implemented during construction as direct by the Caltrans National Pollutant Discharge Elimination System statewide storm water permit. 5. Work within actively flowing water would be avoided where feasible.
2.3.3 Plant Species	 The areas where black-flowered figwort plants are found would be avoided to the maximum extent practicable. Areas would be off-limits to construction activities, designated as an environmentally sensitive area on the plans sheets, and delineated on the ground during construction. Any plants that have apparent viable seed and cannot be avoided would be salvaged and deposited on the surface in unaffected habitat adjacent to the project. The manzanita plants would be avoided. Areas where they've been found would be off-limits to construction activities. The areas would be designated as an environmentally sensitive area on the plan sheets, and delineated on the ground during construction.
2.3.4 Animal Species	Southwestern pond turtle 1. All areas beyond the minimum required for construction would be off limits to construction activities in order to minimize effects to aquatic habitat, potential upland nesting habitat, and potential refuge sites. An environmentally sensitive area would be delineated

to prohibit such activities.

- 2. Any individual encountered in the work area during preconstruction surveys for California tiger salamander and California red-legged frogs would be relocated to suitable habitat.
- 3. The installation of undercrossings (refer to Section 2.3.5 for details on mitigation for California tiger salamander) could open up new areas of upland. Newly installed barriers would prevent future road kill at these locations.

Loggerhead shrike

4. Measures would be included in the standard special provisions to protect all migratory birds, including loggerhead shrikes (See Section 2.3.4).

California horned lizard

5. All areas beyond the minimum required for construction would be off limits to construction activities. Any individuals encountered in the work area during pre-construction surveys for California tiger salamander and California red-legged frogs would be relocated to suitable habitat.

Western spadefoot toad

6. All areas beyond the minimum required for construction would be off limits to construction activities. Any individuals encountered in the work area during pre-construction surveys for California tiger salamander and California red-legged frogs would be relocated to suitable habitat. Amphibian undercrossings and barriers proposed as part of this project would reduce potential road kill for the Western spadefoot toad.

American badger

7. To minimize effects to habitat all areas beyond the minimum required for construction would be off limits to construction activities. Potential burrows would be inspected to verify empty

	prior to construction activities.
	California red-legged frog (frogs)
2.3.5 Threatened and Endangered Species	1. Only U.S. Fish and Wildlife Service (Service)-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frog during preconstruction surveys and ongoing monitoring throughout construction of the project.
	2. Ground disturbance would not begin until written approval is received from the Service that the biologist is qualified to conduct the work.
	3. Before any activities begin, the approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California red-legged frog and its habitat, the specific measures that are being implemented by the project to conserve frogs, and the boundaries within which the project may be accomplished.
	4. The exclusionary fencing that would be installed at three locations for salamander would also exclude frogs from entering the work site at these locations.
	5. Construction activities would be avoided within the breeding ponds near Campbell Road when the ponds flood into the construction zone.
	6. A Service-approved biologist would be present at the work site until all frogs have been removed, workers have been instructed, and disturbance of habitat has been completed. Then Caltrans would designate a person to monitor on-site compliance with all minimization measures.
	7. Minimization measures to be implemented for salamanders would also reduce potential impacts to frogs.
	8. Undercrossings proposed for salamanders would be designed to help frogs cross the highway safely as well.

- 9. Barriers and undercrossings would be designed to accommodate both frogs and the salamanders, reducing the amount of road kill in this area for both creatures.
- 10. The number of access routes, size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Area fencing would be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frogs.

California tiger salamander

- 1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California tiger salamander.
- 2. Ground disturbance would not begin until written approval is received from the Service that the identified biologist is qualified to conduct the work.
- 3. Before any activities begin, the approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California tiger salamander and its habitat, the specific measures that are being implemented to conserve the salamander for the project, and the defined boundaries for the project construction.
- 4. Exclusionary fencing would be installed at the critical locations (in the vicinity of the ponds and where the salamanders were present) to stop salamanders from entering the construction area. Exclusionary fence would be installed along both sides of the highway at the limits of the construction zone near the breeding ponds. The exclusionary fence may need to be relocated from the north side of the Campbell Ponds as the temporary pond fills and recedes. The approved biologist would monitor installation of exclusionary fencing.
- 5. Construction activities would be avoided within the Campbell

breeding ponds when the ponds flood into the construction zone.

- 6. Prior to vegetation removal and grading activities, the approved biologist would survey for and relocate any salamanders identified within potential upland habitat.
- 7. A percentage, yet to be determined, of small mammal burrows with potential salamander habitat would be hand excavated prior to construction activities by the approved biologist. Any salamanders found during hand excavation activities would be relocated the shortest distance possible, by approved biologist, to a location that has suitable habitat and would not be affected by project activities. A rodent burrow hand excavation plan would be submitted to the Service for approval prior to excavation activities beginning.
- 8. The approved biologist would be present at the work site until all attempts to remove the salamanders are complete, workers have been instructed, and disturbance of habitat has been completed. Caltrans would then designate a monitor to ensure on-site compliance with all minimization measures.
- 9. During project activities, all trash that may attract predators would be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris would be removed from work areas.
- 10. All refueling, maintenance, and staging of equipment/vehicles would take place at least 60 feet from riparian and pond habitat. Measures would be taken to avoid situations where a spill could drain directly toward aquatic habitat.
- 11. The project would be replanted with an assemblage of native, riparian, wetland, and upland vegetation suitable for the area. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. Erosion control measures would be implemented around newly installed amphibian under crossing areas.

- 12. The number of access routes, size of staging areas, and the total area of the activity would be limited to the minimum necessary to achieve the project goal. Environmentally sensitive area fencing would be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California tiger salamander habitat.
- 13. To control sedimentation during and after project implementation, Caltrans would implement best management practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act, for the specific project. If best management practices are ineffective, Caltrans would attempt to remedy the situation immediately, in consultation with the Service.
- 14. To ensure that diseases are not conveyed between work sites, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force would be followed by the Service-approved biologist at all times.
- 15. To minimize the impacts of effectively building a dispersal and migration barrier at Campbell Ponds, undercrossings would be constructed under the facility for the length of road that is adjacent to both ponds. Undercrossings would consist of culverts spaced 150 feet apart. Amphibian barriers would be constructed between undercrossings to channelize salamanders to undercrossings. Adjacent to the westernmost Campbell Pond, where most adult salamanders were detected during upland surveys, a 60-foot viaduct would be constructed. The undercrossings would increase the chances of successful highway crossings for California tiger salamander after highway widening. A series of three-culvert type undercrossings, with similar spacing, as described above, would also be installed east of Tularosa Road.
- 16. To minimize impacts to the Campbell Pond breeding ponds, the slopes on the north side of the alignment would be left at their current 2:1 slope instead of implementing the standard 4:1 slope.
- 17. California tiger salamander have been observed within the Caltrans

	right-of-way, north of the highway and east of Hapgood Road, in an area that does not hold water long enough to provide suitable breeding habitat. However, salamanders probably use the swale as a resting area during migrations and dispersal. This area would be established as an environmentally sensitive area and would be avoided during construction. 18. Design consideration would be made in areas of the project with salamander movement to eliminate or modify existing or new structures in the facility that could potentially be a barrier to California tiger salamander movement. Items such as curbing, drainage grades, and steep sided drainage ditches would be designed to allow for maximum California tiger salamander movement. 19. Caltrans shall provide a plan to U.S. Fish and Wildlife Service to monitor the use and effectiveness of the amphibian undercrossings. Said plan shall be due prior to completing construction on the
2.3.6 Invasive Species	In compliance with the Executive Order on Invasive Species, Executive Order 13112, the landscaping and erosion control included in the project would not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species were found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.
2.4 Cumulative Impacts	Mitigation measures included for the purposes of offsetting impacts to visual resources and endangered species would eliminate the potential for this project to contribute to cumulative impacts.

Appendix H Comments and Responses

Appendix H addresses the comments received on the Initial Study/Environmental Assessment for the Highway 246 Passing Lane Project. That document was circulated for public review and comment from August 18, 2009 to September 17, 2009. A Notice of Intent to Adopt a Mitigated Negative Declaration along with a public hearing announcement was mailed to a list of stakeholders that included both governmental offices and private citizens who live along the corridor and surrounding areas. A public notice was also published twice in the local newspaper (Lompoc Record) on Sunday, August 17, 2009 and Wednesday, August 26, 2009. The public hearing was held Wednesday, September 2, 2009. Approximately 70 people attended the meeting; a court reporter was provided to record any public comments.

The environmental document was also available for public review at the Lompoc Public Library, the Buellton Public Library, the Caltrans District Office in San Luis Obispo and on the Caltrans website. Comments received on the environmental document varied widely. Some people supported the project with a few suggested revisions, while others expressed a preference for widening the entire 11-mile stretch to four lanes. Some questioned whether the project was necessary, especially given the current economic situation and the project's cost.

This appendix is organized according to the parties commenting on the document:

Section 1.0 State Agencies

Section 2.0 Local Governments

Section 3.0 Individuals

Section 4.0 Comment Cards from Public Hearing

Section 5.0 Transcripts from Public Hearing

Section 1.0 State Agencies



STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



ARNOLD SCHWARZENEGGER GOVERNOR

September 21, 2009

Yvonne Hoffmann California Department of Transportation, District 5 50 Higuera Street San Luis Obispo, CA 93401

Subject: Highway 246 Passing Lanes Project

SCH#: 2009081063

Dear Yvonne Hoffmann:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on September 17, 2009, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

7.' Scott Morgan

Acting Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov



STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



ARNOLD SCHWARZENEGGER GOVERNOR

September 24, 2009

CYNTHIA BRYANT

Yvonne Hoffmann California Department of Transportation, District 5 50 Higuera Street San Luis Obispo, CA 93401

Subject: Highway 246 Passing Lanes Project SCH#: 2009081063

Dear Yvonne Hoffmann:

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on September 17, 2009. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2009081063) when contacting this office.

Sincerely,

(a : Scott Morgan

Acting Director, State Clearinghouse

Enclosures

cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Response to Comments from the Governor's Office of Planning and Research

Thank you for acknowledging Caltrans' compliance with the State Clearinghouse review requirements. The State Department of Parks and Recreation letter is addressed separately. See next page.



State of California - The Resources Agency

Arnold Schwarzenegger, Governor

Ruth Coleman, Director

late

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SEP 2 4 2009

STATE CLEARING HOUSE

DEPARTMENT OF PARKS AND RECREATION Channel Coast District 911 San Pedro Street Ventura, CA 93001 (805) 585-1850

September 23, 2009

Ms. Yvonne Hoffmann California Department of Transportation 50 Higuera St. San Luis Obispo CA 93401

RE: MND Hwy 246 Passing Lanes - SCH#2009081063

Dear Ms. Hoffmann:

We have had the opportunity to review the Initial Study with Proposed MND for the Highway 246 Passing Lanes. This project terminates in the vicinity of La Purisima Road. This intersection is located on property that historically was a part of the Mission La Purisima. From the intersection looking NW travellers can view lands now belonging to La Purisima Mission State Historic Park.

We understand the need for the proposed project. Given the historic uniqueness of the project location, we respectfully request that a 5024 evaluation be undertaken as part of this current review process. This action will ensure protection of cultural resource values in the area.

Staff from my office is available to assist you with historic information related to the Mission that you might need to complete the 5024 process.

Sincerely,

Richard Rozzelle District Superintendent Channel Coast District

rrozz@parks.ca.gov

Response to Comment from State Department of Parks and Recreation

Thank you for your letter, dated September 23, 2009, expressing your interest in a Public Resources Code Section 5024 evaluation in connection with the proposed Highway 246 Passing Lanes Project. We wish to assure you that Caltrans has given due consideration to the historic setting in establishing the Area of Potential Effects (APE) for this project, and that our cultural resource studies have been carried out appropriately and in conformity with both Section 106 of the National Historic Preservation Act and Section 5024 of the California Public Resources Code. Our guidance for both federal and state compliance is the January 1, 2004 Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California (Programmatic Agreement).

Under Attachment 3 of the Programmatic Agreement, Area of Potential Effects
Delineation, the "guiding principle" is that an Area of Potential Effects "should be
commensurate with, and provide for, an appropriate level of effort to take into account an
undertaking's potential for effects on historic properties." The Programmatic Agreement
states further, "it is rarely necessary to extend an APE to include entire large districts or
landscapes, large rural parcels, extensive functional systems, or long linear features if
potential effects on the whole could clearly be negligible."

Cultural resources were evaluated in a Historical Resources Evaluation Report completed in December 2007. This report was prepared in keeping with the Programmatic Agreement, and resources were also evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. Caltrans completed its cultural studies and reported its findings in a Historic Properties Survey Report, which was submitted to the State Historic Preservation Officer (SHPO) in December 2008. In a letter dated February 9, 2009, the State Historic Preservation Officer concurred with Caltrans' findings and did not object to the Area of Potential Effects as delineated.

As indicated in the Initial Study, the project limits extend from Highway 246 post mile 11.8 (southeast of the intersection with Mission Gate Road and west of Cebada Canyon Road) to post mile 20.9 (just east of Domingos Road). The westernmost portion of the project would consist of conforming to the existing alignment; new construction activities

Appendix H • Comments and Responses

are confined to the portion of the project limits that lie to the east of Cebada Canyon Road, which lies out of the immediate view of La Purisima Mission State Historic Park.

Section 2.0 Local Agencies



- 260 North San Antonio Road, Suite B Santa Barbara, CA 93110
- Phone: 805/961-8900 Fax: 805/961-8901 www.sbcag.org

September 22, 2009

Mr. Matt Fowler Caltrans District 5 50 Higuera Street San Luis Obispo, CA. 93401

Re:

Highway 246 Passing Lanes Project

Subject:

Comments to Draft MND/EA

Matt:

Thank you for the opportunity to comment on the above mentioned document. Below are SBCAG's comments.

- 1. Page 3. Figure 1.2 still shows the project limits extending to the west to include the Purisima Road intersection. We understand that a separate safety project to address the focused concern of accidents at the Purisima Road intersection is underway and will undergo a separate project development path. Unfortunately, it is not clear how this change in project limits will be handled and what effect this may have (or not) on the findings in the environmental document for SR 246 Passing Lanes project. It is SBCAG's assumption that without the Purisima intersection improvements that the SR 246 Passing Lanes projects would begin where the EB Passing Lane approaching Tularosa Road starts.
- 2. Page 3 and Page 5. Even though SR 246 does function as a commuter route, it would seem appropriate to also mention some of additional stakeholder groups that benefit from using the route (i.e., access to Vandenberg AFB, ingress/egress to agricultural fields, as well as recreation and tourism with the golf course, winery/tasting rooms and the state park.
- 3. Page 7. In the document it is not clear how the LOS is determined, though you give two criteria: 1) % time following, and 2) average travel speed. You provide a graphic (Figure 1.3) which describes LOS for Class I highways based on speed only, but this does not directly correlate to the LOS shown in Table 1.1 and Table 1.2 since it does not account for the component played by the "% time following" criteria. More discussion required.
- 4. Page 7. Is the information available to show the directional characteristics (eastbound and westbound) of both criteria, average speed and % time following in Table 1.1 and other related tables. Disclosure of this information might be helpful in showing the true directional nature of the need (AM eastbound and PM westbound).
- Page 8. Is the Cebada Canyon intersection still to be part of the SR 246 project or will be part of the Purisima safety project. See comment 1 above.
- Page 13. Which of the elements in Table 1.5 are included as part of the Purisima project. Add a header which groups these individual elements into the various

Member Agencies

Ruellton = Carninteria = Goleta = Guadalune = Lomnoc = Santa Rarhara = Santa Maria = Solvand = Santa Rarhara County

Matt Fowler Caltrans District 5

Page 2

September 22, 2009

- improvement locations (ie. Widening of Santa Rosa Creek Bridge and Drum Canyon intersection channelization would be grouped together).
- 7. Page 16. The statement is made that there is "strict design criteria" for passing lane lengths, distance between etc. Is there design policy or guidance on this and if so should be referenced. Otherwise, indicate that those parameters were chosen to optimize the efficiency of the passing lanes.
- 8. Page 24. Provide a reference for the 2040 population forecast.
- 9. Page 30. Add that Public Information Program will be part of Traffic Management Plan.
- 10. Page 32. You provide two potentially affected users of highway as to the visual impacts: tourist and the bicyclist. What about the commuter, who is a frequent user but their exposure is less.
- 11. Page 35. Are any of the floodplain impacts eliminated with the change in project limits as a result of the Purisima Road improvements being implemented separately?

Sincerely,

Fred Luna Project Manager

cc: Yvonne Hoffman, Environmental Planner, Caltrans District 5 Sara von Schwind, Project Manager, Caltrans District 5

Response to Comment from Fred Luna, Santa Barbara County Association of Governments

Thank you for your comment letter dated September 19, 2009. The following responses address the various issues you've raised. The responses are numbered to correspond with your comments.

Response to comment #1: With the removal of the work at the Purisima Road intersection, the project limits would begin just west of Cebada Canyon Road. The work in the vicinity of Cebada Canyon Road would be limited to a pavement overlay and restriping. Although the Purisima Road intersection was included in the study area, its removal does not negatively affect any findings required as part of this document. Because the Purisima Road Intersection Improvement Project falls within a floodplain, there is one less floodplain to consider in the project. There were originally four floodplains within the project limits, and now there are three.

Response to comment #2: Per your suggestion, pages 3 and 5 of the final environmental document have been modified to include information related to the various stakeholder groups that benefit from using Highway 246. The following wording has been added:

In addition to serving as a commuter route between Lompoc and Buellton and beyond, the highway serves as access to Vandenberg Air Force Base/Vandenberg Village, La Purisima Mission, La Purisima Golf Course and an increasing number of wineries/tasting rooms in the region.

Response to comment #3: Figure 1.4 (below) has been added to page 8 of the final environmental document to clarify the method used to determine the level of service (LOS) for Highway 246. It shows the relationship between Percent Time Spent Following and speed in determining the LOS for a 2-lane highway segment.

Class I Two-Lane Highway LOS Criteria 100% LOS F applies whenever the flow rate exceeds the segment capacity. 90% Percent Time-Spent-Following 80% D 70% 60% C 50% В 40% 30% 20% 10% 30 35 40 45 50 55 60 65 Average Travel Speed (mph)

Figure 4

Response to comment #4: The following footnote has been added to Table 1.1, 1.2 and 2.2: LOS shown applies to the peak direction of travel, AM Eastbound and PM Westbound

Response to comment #5: As stated in response to comment #1, the Cebada Canyon intersection would be part of the Passing Lanes project. The Purisima Road Intersection Improvement Project would be restricted to the one intersection. Once the change is formally approved, the western project limits for the Passing Lanes project will be post mile 12.30 instead of post mile 11.6.

Response to comment #6: The Purisima Road Intersection Improvement Project includes only the work proposed as part of the proposed roundabout. No other improvements are included since this location was separated out. Table 1.5 has been modified to clarify the various components of the project.

Response to comment #7: The draft document indicated there was an applicable design standard related to the spacing and length of passing lanes. However, on further research, it was determined that passing lane criteria are based on the data provided in the traffic analysis. Critical factors include average daily vehicle counts,

level of service, and percent time spent following. The statement on page 18 under Alternative "2F" was modified to clarify this issue further.

Response to comment #8: The Santa Barbara County Association of Governments' Regional Growth Forecast 2005-2040, dated August 2007, has been added as a reference for the 2040 population forecast.

Response to comment #9: A sentence was added to the text that was on page 33 to indicate a Public Information Program would be part of the Traffic Management Plan.

Response to comment #10: The discussion at the end of the Affected Environment section of Visual/Aesthetics that was on page 34 was revised to include the perspective of the commuter. This section now includes the following: *Commuters often have the sensitivities of local residents, yet at the same time may experience a reduced awareness of the detailed roadside environment due to the routineness of their commuting activity.*

Response to comment #11: The modified project limits do not change the floodplain impacts as identified in this environmental document. The floodplain discussion within this document accounted for the removal of the identified floodplain at the Purisima Road/Highway 246 intersection due to the fact that it was no longer part of the project.

County of Santa Barbara



Michael F. Brown County Executive Officer 105 East Anapamu Street, Suite 406 Santa Barbara, California 93101 805/568-3400 • Fax 805/568-3414 www.co.santa-barbara.ca.us

Executive Office

September 30, 2009

Yvonne Hoffmann, Associate Environmental Planner California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401

Fax: 805-549-3233

Email: yvonne_hoffmann@dot.ca.gov

RE: Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment for the Highway 246 Passing Lanes Project

Dear Ms. Hoffmann:

Thank you for the opportunity to comment on the Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment for the Highway 246 Passing Lanes project. At this time, the County submits two attached comment letters from the Agricultural Commissioner's Office and the Public Works Department. The County also provides the following comments for your consideration:

General Comments:

1

2

3

The *Growth Section* of Table S.1 (on page vi) should indicate that, "the proposed project would accommodate predicted growth planned for by the Santa Barbara County <u>Association of Governments</u>."

Environmental Analysis Comments:

The draft Mitigated Negative Declaration/Environmental Assessment should address the specific issues discussed below. Please refer to the County's Significance Thresholds for Environment Impacts to provide guidance on what constitutes a significant impact as defined by the County of Santa Barbara. Pursuant to CEQA §15126.4 (a)(1)(B), appropriate mitigation should be included to address these potential impacts.

Aesthetics/Geology:

The draft Mitigated Negative Declaration/Environmental Assessment should provide additional discussion of the potential for the project to result in significant impacts to the County's visual resources and existing landforms. Specifically, the impact analysis should include approximate grading quantities (cubic yards of cut and fill), height of cut and fill slopes, and other related grading activities associated with the proposed highway realignment and grade change near Tularosa Road.

Biological Resources:

The draft Mitigated Negative Declaration/Environmental Assessment should provide additional discussion of the potential for the project to result in significant impacts to the County's biological resources. For example, this impact analysis could include a discussion of whether or not proposed bridge construction activity would have the potential to impact existing bat colonies. Additionally,

Yvonne Hoffmann, Associate Environmental Planner September 30, 2009 Page 2 of 2

Section 2.3.2 of the draft Initial Study indicates that the project will result in temporary impacts to Wetlands and Riparian habitat. No mitigation measures, however, are proposed to restore these impacted areas. Information regarding the proposed revegetation, recontouring, or other mitigation efforts that would be implemented to offset these temporary impacts should be provided.

Cultural Resources:

The draft Mitigated Negative Declaration/Environmental Assessment should discuss the potential for the project to result in significant impacts to Archaeological Resources. The Cultural Resources section of the Initial Study makes brief mention of potential impacts to historically significant structures. Additional discussion of the potential impacts to prehistoric Archaeological Resources which may result from proposed grading activity should be included in the document.

County staff is available to provide any clarification regarding the County's current Comprehensive General Plan policies that may be applicable as this project moves forward. The County has no further comments on this project at this time and looks forward to continued dialogue on future projects. If you should have further questions, please do not hesitate to contact my office directly, or David Matson, Deputy Director in the Office of Long Range Planning at (805) 568-2068.

Sincerely

John McInnes

Assistant County Executive Officer

cc: Derek Johnson, Director, Office of Long Range Planning

David Matson, Deputy Director, Office of Long Range Planning

William D. Gillette, Agricultural Commissioner, Agricultural Commissioner's Office

Diana Estorga, Project Engineer, Public Works Department

Attachments: Attachment A: Agricultural Commissioner's Office Comment Letter

Attachment B: Public Works (Transportation Division) Comment Letter

Response to the Comment from Santa Barbara County

Thank you for your comment letter dated September 30, 2009. The following responses address the various issues raised by County staff. The responses are numbered to correspond with the comments.

Response to comment #1: Per your suggestion, an addition has been made to the Summary Table (S.1), under growth impacts. The following statement has been added: *The proposed project accommodates predicted growth planned for by the Santa Barbara County Association of Governments.*

Response to comment #2: The following details related to potential Aesthetics/Geological changes associated with proposed work near Tularosa Road have been added to the discussion on page 35.

The proposed project would have the greatest impact on the visual environment near Tularosa Road. There, the highway would shift to the south and be lowered approximately 20 feet, thereby affecting the landform and vegetation in the area. New cut slopes would be required, reaching a maximum height of approximately 40 feet above the new roadway. Once the road is moved to the south, the former location would become a stepped hillside with the placement of a bench (horizontal cut) halfway up the northern slope to help control runoff. A bench would also be constructed midway up the new slope along the southern side of the road. All totaled, approximately 215,430 cubic yards would be excavated and 101,663 cubic yards would be required for the embankment. Removal of native oak trees and chaparral near Tularosa Road to accommodate the new alignment would also contribute to the loss of visual character.

Response to comment #3: Caltrans biological staff and consultant biologists intensely studied the project study area throughout a two-year period. This included floristic surveys, general biological surveys, habitat assessments throughout the study area, fairy shrimp, California tiger salamander, and California red-legged frog surveys where habitat existed for these species, and wetland/waters of the U.S. delineations. During the many field hours spent completing these surveys, an exhaustive inventory of biological resources that occur in the study area was generated. Potential impacts to any biological resources occurring in the study area that could result in a significant impact were addressed in the Natural Environmental Study. Biological resources that were not found to exist in the study area were not addressed. Several bat species are known to occur in the vicinity of the project.

However, they were not found to inhabit the study area and subsequently were not addressed as an impacted species in the Mitigated Negative Declaration/ Environmental Assessment. Please refer to the Natural Environmental Study for a list of all biota observed during surveys and an expanded discussion of the biological resources that occur in the study area.

The following measure was added to Section 2.3.2, Avoidance, Minimization, and/or Mitigation Measures (on page 65) to address temporary impacts to wetlands and riparian habitat: *Temporary impacts to riparian* areas (and waters of the U.S.) will be restored to original contours and revegetated with native species in coordination with the Army Corps of Engineers, the Regional Water Quality Control Board and the California Department of Fish and Game during the permit process. The temporary impacts to wetlands would occur at the fringe of the Campbell ponds. This area would be restored to original contours after construction activities and left to naturalize from the plentiful wetland vegetation that occurs around the remainder of the undisturbed pond.

Response to comment #4: Caltrans has evaluated cultural resources in a Historical Resources Evaluation Report completed in December 2007. Extensive archaeological surveys were conducted within the project limits. Caltrans prepared an Extended Phase I report listing these efforts and their findings. There was no further discussion needed in the environmental document since there were no significant resources found. The following determination was made: 1) There were no resources found that were eligible for inclusion in the National Register of Historic Places; 2) A Finding of No Historic Properties Affected was concurred by the State Historic Preservation Officer (SHPO) in a letter dated February 9, 2009 (refer to Appendix B).

Appendix H • Comments and Responses



William D. Gillette Commissioner / Director

September 23, 2009

Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401

Re: Initial Study/Environmental Assessment Highway 246 Passing Lanes Project

Dear Mr. Fowler:

Thank you for the opportunity to comment on you Initial Study/Environmental Assessment of the propose Highway 246 Passing Lanes Project. The Agricultural Commissioner's Office offers the following comment:

Table 2.1 on page 25 shows that 1.09 acres of a 312 acre parcel will need to be acquired for right-of-way needs. If this 312 acre parcel is under Williamson Act contract a replacement contract will be needed to reflect the new legal description.

If you have any questions please contact me at the address and telephone number below.

Sincerely,

William D. G. Wette

William D. Gillette Agricultural Commissioner

> 263 Camino del Remedio • Santa Barbara, California 93110 Phone (805) 681-5600 • Fax (805) 681-5603 www.countyofsb.org/agcomm/

Response to the Comment from the Santa Barbara County Agricultural Commissioner's Office

Thank you for your comments and guidance in regard to the proposed permanent acquisition of 1.09 acres from a large grazing parcel. Further research determined that the subject parcel is under a Williamson Act contract. Once the proposed acquisition occurs, the 312.09-acre parcel would be reduced to a 311-acre parcel. The acquisition would require a replacement Williamson Act contract, which would reflect the adjusted parcel description.

The initial study checklist in Appendix A has been changed to reflect this finding. The response to whether the project would affect a Williamson Act contract has been changed to "yes, but will have a less than significant impact." Acquisition of a small portion of this Williamson Act contract property is not considered to be an impact because the property is not classified as prime agricultural land or land having statewide importance. During coordination, the Natural Resources Conservation Service staff determined that the subject parcel is not under its jurisdiction because it is not classified as prime agricultural land and serves as grazing land, not cropland.

Section 3.0 Individuals, Including E-mails and Comment Cards

JANICE N. KELLER P.O. Box 504 Lompoc, CA 93438-0504 (805) 735-1408

September 16, 2009

Matt Fowler Caltrans District 5 50 Higuera Street San Luis Obispo, CA 93410

e-mailed

RE: Highway 246 Passing Lanes Project

Dear Mr. Fowler:

As you are well aware, the Lompoc community is divided on what improvements, if any, should be made to Highway 246 from Purisima to Domingos Roads. Over the years, I have addressed this issue, but will do so again to insure that my comments are in the current record.

1	I do not feel that improvements between Purisima and Domingos Roads are the best use at this time of limited Caltrans funds. However, a roundabout at the intersection of 246 and Purisima Road may very well solve the problems at that intersection. The slow down of traffic at the roundabout would serve to space the vehicles so that, if the speed limit is observed, no passing lanes would be necessary.
2	Also, what I would like to see studied further and implemented at the earliest possible date is the widening of and/or other physical improvements to Hgwy 246 from Purisima Road (or thereabouts) to the junction of SR 1, including upgrading the Robinson Bridge crossing of the Santa Ynez River. These projects will eliminate most of the concerns about efficient and safe access to and from the City. They also will facilitate the easiest access to the new hospital in Lompoc.
3	Although not under current discussion, I repeat my adamant opposition to a Central Avenue extension bridge over the Santa Ynez River. Following are some of my reasons for objecting, but not in any particular order of importance: the expense; the bridge will result in more cars going through the residential areas along A Street and Central Avenue and through the City's most highly impacted intersection, H Street and Central Avenue; the Hospital and Home Depot are located near the intersection of Hgwy 1 and 246; Home Depot delivery trucks and customers will want to take the shortest and most direct route; most commuters enter and exit the Lompoc Valley using Hgwy 1 to the north and south; the bridge will physically divide the community; it will have a significant impact on agriculture to the east of the City; and the variations in projected population growth and the constraints on development resulting from the Class A soils to the west of the City do not justify the expense. Please feel free to call me at (805) 735-1408 to further discuss my comments. Thank you for your work on this issue.
	Sincerely,

/s/Janice Keller Former Lompoc City Councilwoman

JK:pbc

Response to the Comment from Janice Keller

Thank you for your comments regarding the proposed Highway 246 Passing Lanes Project. Your points are addressed separately below.

Response to comment #1: The roundabout project proposed for the intersection of Purisima Road and Highway 246 is moving forward as a separate project. It is currently in the design phase and is scheduled for construction in late fall 2011. The intersection improvements at Purisima Road, while improving the operation and safety of the intersection, would not likely improve the level of service of Highway 246 between Lompoc and Buellton based on the percentage of vehicles following other vehicles. Therefore, the passing lane project is still proposed.

Response to comment #2: Your suggestion and comment for improvements to Highway 246, between Purisima Road and the junction of Route 1, and the Central Avenue extension are noted. These areas are outside the project limits. Proposals for improvements to state highways within Santa Barbara County are typically processed through the Santa Barbara County Association of Governments. Caltrans could initiate projects on Highways 1 and 246 if safety or operational data suggest a deficiency. The proposed soft median barrier project, which will begin construction in 2010, will construct safety improvements on Highway 246 (beginning at Drum Canyon) and extend to Highway 1, but no other Caltrans projects/studies have been considered in the vicinity of Robinson Bridge.

Response to comment #3: Your objection to the Central Avenue project is noted. As you are aware, Central Avenue improvements are not part of the proposed project. Discussions regarding the section of Highway 246 that lies west of Purisima Road and the entrance to Lompoc have been between the City of Lompoc and the Santa Barbara County Association of Governments.

Appendix H • Comments and Responses

Matt C Fowler/D05/Caltrans/CAGov To Yvonne Hoffmann/D05/Caltrans/CAGov@DOT OC. 09/14/2009 03:41 PM boc Subject Fw: Highway 246 Passing Lanes Project Forwarded by Matt C Fowler/D05/Caltrans/CAGov on 09/14/2009 03:41 PM ---"Justin Ruhge" <jaruhge@hotmail.com> To <matt_c_fowler@dot.ca.gov> 09/14/2009 02:42 PM Subject Highway 246 Passing Lanes Project Highway 246 Passing Lanes Project C/O Caltrans 5th District 9-14-2009 Atten: Matt Fowler For 30 years now the growing number of commuters from Lompoc have waited for the extension of the four-Tane parkway from Domingos Road to Ocean in Lompoc. 1 It is now disappointing to see that all that Caltrans is considering is passing lanes for a small part of the 13 miles route. The project even stops in the middle of nowhere. 2 A bridge widening across Santa Rosa Creek is not enough for a four-lane boulevard. It is very short sighted of Caltrans and SBCAG to go through the planning and surveying for a passing lanes project when only a little more effort and cost would be 3 required to lay out the road improvements for the extension of the existing parkway from Buellton. The bridge at Santa Rosa Creek should also be widened to four lanes. 4 The three miles from the west end of the proposed project should be designed at the same time and included in this project. In a letter from Jim Kemp, Director of SBCAG to The California Transportation 5 Commission, dated August 10, 2009, he requests funding for the Orcutt Union Valley

For the same reasons of economic vitality of the Lompoc region, Caltrans and the

providing a direct connection to the airport .."

Parkway Project which he states "will improve the economic vitality of the region by

Appendix H • Comments and Responses

SBCAG must include a study of the extension of the present 246 parkway to Lompoc from Domingos Road. Lompoc's connection to National Highway 101 is critical to the economic vitality of the City.

As stated in Mr. Kemp's letter, "SBCAG, the County, Caltrans and the City of Santa Maria have formed a partnership.." for the Union Valley Parkway Project

Just why not a partnership of the same kind for the **economic vitality** of Lompoc? Lompoc's commuters on 246 are the bread and butter income of the City and the region of 60,000 people. Orcutt is not even a city.

Please consider these comments for the future vitality of the City of Lompoc.

Concerned Taxpayers, I.N.C.

Justin M. Ruhge, Lompoc. CA. 93436, 805-7379536

Response to the Comment from Justin Ruhge

Thank you for your comments regarding the proposed Highway 246 Passing Lanes Project. Your points are addressed separately below.

Response to comment #1: Your opposition to Caltrans' decision to eliminate the four-lane widening alternative from consideration is noted. As indicated in Section 1.3.4 of the environmental document, 20-year traffic projections did not justify widening the entire stretch of Highway 246 within the project limits. The Traffic Analysis (March 2010) determined that level of service (LOS) on this stretch of the highway would be A or B during peak-hour traffic periods for many years beyond the standard design timeline of 20 years. The increased effort necessary to widen the highway to four lanes would require more private property and pose a greater risk for significant environmental impacts. Caltrans cannot justify expenditure of public funds for a project that is not supported by traffic needs.

The project limits extend for 9 miles. The project's start and end points were selected based on where the four-lane parkway ends on the eastern end of the highway and the location where a percentage of traffic is diverted onto Purisima Road toward Vandenberg Village and the Air Force base on the western end. Once the decision was made to separate out the Purisima Road Intersection Improvement Project, the project limits shifted to just east of Cebada Canyon Road.

Response to comments #2 and #4: A bridge cannot be widened beyond what is dictated by the scope of the project because additional environmental impacts and project costs must be justified.

Response to comment #3: The studies conclude that widening the entire stretch to four lanes would result in both higher land acquisition costs and environmental mitigation costs.

Response to comment #4: The area west of Purisima Road was not included in the scope of this project and has not been studied because this location lies outside the targeted area. The area west of Purisima Road would require a focused transportation study to be conducted by Santa Barbara County Association of Governments and the City of Lompoc.

Response to comment #5: Santa Barbara County Association of Governments determines which projects should be considered. For this reason, you should continue to express your concerns to the Santa Barbara County Association of Governments.



SANTA BARBARA NEWS-PRESS

THURSDAY, SEPTEMBER 10, 2009

Hwy. 246: Rural road or freeway?

altrans believes Highway 246 between Lompoc and Buellton is a suburban Buellton is a suburban road and needs to have miles of passing lanes, a roundabout bicyclists will love jockeying with 18-wheelers — a section of the grade dropped 12 feet (that is a lot of dirt) and a bridge it rebuilt 10 years ago widened. Nothing like planning.

To do this, Caltrans is going to expand its easement — bye-bye farmland. All of this is right through the middle of world-class Pinot noir vineyards. And at a time when California cannot pays its bills and is furloughing police, firefighters and other state workers.

2 3

menguers and other state work-ers.

Meanwhile, the county Board
of Supervisors recently rejected
the development of La Purisma
Golf Course, which is smack in
the middle of Caltrans' suburban
and heaques it would be inconme middle of Caltrans' suburban road, because it would be inconsistent with the rural agricultural nature of the area.

How can Caltrans and the Board of Supervisors both be right? Is Highway 246 a rural farm road or a frawary.

farm road or a freeway?

Lompoc





CATHY AND STEVE PEPE

"VINEYARD TOUR"

CLOS PEPE VINEYARDS LLC

SANTA RITA HILLS

HARDONNAY AND PINOT NOIR
OLIVE OIL 4777 HIGHWAY 246 LOMPOC, CA 93436

steve@clospepe.com

cathy@clospepe.com

TEL (805) 735-7867 FAX (805) 736-4754

Response to First Comment from Stephen Pepe

Thank you for your continued interest in matters concerning the Highway 246 corridor between Buellton and Lompoc. Your letter to the editor was also submitted as comments on this project. These comments are addressed below.

Response to comment #1: The project known as the "roundabout project" was separated from the Passing Lanes Project in fall 2008. A public meeting was held to discuss this separate project in April 2009. Several members from the bicycle community expressed their support for the project at the public meeting and in writing. The two representatives of the Santa Barbara Bicycle Coalition indicated that most bicyclists find roundabouts to be safer than intersections with traffic signals. The roundabout design for Purisima Road would accommodate a truck that is up to approximately 75 feet long. Depending on his or her ability and speed, a bicyclist can either remain a "vehicle" and travel the roundabout ahead or behind a car/truck or take the multipurpose path, which will be slightly elevated and separated by a curb and gutter.

Response to comment #2: Highway 246 near Tularosa Road would be realigned to the south and the profile of the grade modified to improve sight distance. This element of the project is widely supported by nearby residents as the best way to improve left turns at this location. The earthwork quantities associated with the realignment of Highway 246 through the Tularosa Road area are approximately 215,430 cubic yards for the excavation and 101,663 cubic yards for the embankment.

Response to comment #3: The existing Caltrans right-of-way is wide enough to accommodate most of the proposed project. One location, near the Tularosa Road intersection, would require a maximum total of 1.09 acres to realign the road to the south and make a profile correction. The 1.09 acres would be acquired from a 312-acre parcel, currently used for grazing. No land associated with vineyards or other crops would be affected.

Response to comment #4: The existing Highway 246 segment within the project limits is officially designated as a two-lane conventional highway, which serves as a primary link to U.S. Route 101 and an intercity daily commuter route between Lompoc and Buellton. A conventional highway is defined as a highway with at-grade intersections and without control of access.

A4 • THE LOMPOG RECORD / Sunday, September 13, 2009

- Your turn -

Letters to the Editor

Wonder why state is broke?

Caltrans officials believe Highway 246 needs to be improved, to the tune of \$60 million, at a time when California cannot pay its bills and is

California cannot pay its bills and is furloughing state workers.
So, what does the \$60 million get you? A 68-foot antinal viaduct, and for the creepy crawlers, several tunnels under 246.
Remember when the bridge at Mail/Drum was washed out and rebuilt 10 years ago? Well, it is not wide enough and has to be widened.

Nothing like planning. Tularosa Road has the grade dropped 12 feet and becomes five lanes, when a middle turn lane would solve that problem.

Caltrans should fix Tularosa Road, and use our tax money to save jobs.

Stephen Pepe

Lompoc



CATHY AND STEVE PEPE

"VINEYARD TOUR" www.clospepe.com

CLOS PEPE VINEYARDS LLC

SANTA RITA HILLS

CHARDONNAY AND PINOT NOIR OLIVE OIL

4777 HIGHWAY 246 LOMPOC, CA 93436

steve@clospepe.com

cathy@clospepe.com TEL (805) 735-7867 FAX (805) 736-4754

Response to Second Comment from Stephen Pepe

The City of Lompoc and the Santa Barbara County Association of Governments initiated the project formerly known as the Four-Lane Widening Project in 2001. The Highway 246 Passing Lanes Project would be funded primarily with Santa Barbara County Measure A funds and supplemented by State Transportation Improvement Program funds. The estimated cost of the project is just under \$40 million.

The proposed 60-foot viaduct and undercrossings are mitigation components to address impacts to the California tiger salamander, recognized as a federally endangered species and a state endangered species. The project cannot receive permit approval from the two agencies responsible for protecting the species without including acceptable mitigation measures. The U.S. Fish and Wildlife Service and Department of Fish and Game were consulted as part of the environmental review process.

In regard to the bridge, the Santa Rosa Creek Bridge was replaced in 1999 after it was severely damaged during a storm. Funding to replace the bridge was obtained from the Federal Emergency Management Agency (FEMA), which limited the reconstruction to in-kind replacement.

The profile adjustment and road realignment proposed for the highway near Tularosa Road would improve sight distance in this area. The proposal to add a middle lane was considered, but it was determined that it would not solve the visibility problem that now hampers residents making turns off of Tularosa Road.

The following comment was received in place of a comment card:

PASSING LANES FOR HIGHWAY 246

The main problem with traffic on 246 is that most drivers are exceeding the speed limit. Since adequate assets are not available to patrol the highway, passing lanes are needed. I do not agree with one part of the proposed project, lowering the grade just west of Tularosa Road. Wouldn't it be better to have five lanes in that area? Have two lanes of traffic each way, plus a left turn lane for traffic turning into Tularosa Road. That lane could also be used for traffic turning from Tularosa Road heading east.

John Lawrence

Response to Comment from John Lawrence

Thank you for commenting on the proposed project. The speed limit would not change as a result of the project. As with all highways, the California Highway Patrol is responsible for enforcing the speed limit and maintaining safe speeds as best it can.

In regard to the comment related to the profile adjustment near Tularosa Road, the profile adjustment and road realignment proposed for the highway would improve sight distance at this location. The proposal to add a middle lane was considered, but it was determined that it would not solve the visibility problem that now hampers residents making turns off of Tularosa Road.



Public Hearing Comment Card

State	Route 246 Passing Lanes
NAME: A.V.	KOKATNUR
ADDRESS: 13 Santa C	lara Drive CITY: Lompac ZIP: 93436
REPRESENTING:	self
Do you wish to be added to the Please drop comments in the	he project mailing list? YES NO Comment Box orMail to:
	Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401
I would like the following c	omments filed in the record (please print):
I request ?	hat serious consideration be given to
	werete barrier curb in the median
_ wherever	possible to elimnate the possibility
of head-on	collesions. Although infrequent,
head on cot	lisions often result in multiple
fatalities.	The Passing Lanes project would be
an ideal o	pportunity to add concete modean
_ barrier C	ierb
	Please respond by September 17, 2009
How Did You Hear About This Meeting?	ewspaper newsletter someone other: told me about it
Cultrans:	SBCAG santa barbara county association of governments

Response to Comment from A.V. Kokatnur

Thank you for your comment. Your suggestion to construct a concrete median barrier as part of the Highway 246 Passing Lanes Project is noted. Generally speaking, Caltrans would not consider a hard barrier for anything other than a four-lane divided highway. Exceptions to this rule occur when safety corridors are created as special test zones. Highway 246 does not meet the criteria typically identified when creating a safety corridor.

However, there is an upcoming Caltrans project to construct a soft median barrier on Highway 246, between Domingos Road and Route 1, which includes the entire stretch of this project. The soft barrier project would consist of a set of double-yellow lines bounding a rumble strip, making passing illegal. Construction is scheduled to begin in July 2010. Soft median barrier projects have proven to be very effective for preventing cross centerline collisions.

LOMPOC

Public Hearing Comment Card

State Route 246 Passing Lanes
NAME: RICHARD SPACOBY
ADDRESS: 303 W. WALNIETTY: LOMPOC ZIP: 93436
REPRESENTING: SELF & ALL INTERESTED FAXPAYERS
Do you wish to be added to the project mailing list? TYES NO Please drop comments in the Comment Box or Mail to:
Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401
I would like the following comments filed in the record (please print):
WHERE IN THE PROYECT IS THE "BOUNDABOUT"
TRAFFIC CIRCLE THAT CALTRANS PROPOSED, IT WOULD WORK.
SAMEGAS, CUT AIR POLLUTION AND BE AT THE CUTTING EDGE
OF HIGHWAY DESIGN. PLEASE RECONSIDERIT. THANKS.
Celland Jacoby
Please respond by September 17, 2009
How Did You Hear newspaper newsletter someone other: About This Meeting?
Galtrans* (SBCAG santa barbara county association of governments

Response to the Comment from Richard Jacoby

Thank you for your comment. The proposed roundabout project for Purisima Road and Highway 246 was separated from the Passing Lanes Project in fall 2008. The roundabout was funded as a safety project and will begin construction in late fall 2011.



Public Hearing Comment Card

State Route 246 Passing Lanes

NAME: Kare	
ADDRESS: 49	75 Jalama Rd Lompoc ZIP: 93436
	ANTA BARBARA
REPRESENTING:	My step
Do you wish to be adde Please drop comments i	rd to the project mailing list? 🔲 YES 🔯 NO n the Comment Box orMail to:
	Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401
	ing comments filed in the record (please print): like to know why the speed limit on Hwy 246
I would	
will not	
lanes an	e completed?
The second secon	
	Please respond by September 17, 2009
How Did You Hear	V newspaper newsletter someone other:
About This Meeting?	newspaper newsletter someone told me about it
15 F	(SBCAG







Response to Comment from Karen Pata

Thank you for your comment. According to California Vehicle Code, Section 22349, the maximum speed limit for a two-lane undivided highway is 55 miles per hour. A speed increase above the 55-mile per hour limit would not be prudent due to the many at-grade intersections and private access roads/driveways within the project limits on Highway 246. It should be noted that passing lanes are not considered through lanes.



Public Hearing Comment Card

	Route 246 Passing Lanes
NAME: Barba	ra Kusulas
ADDRESS: 540	Campiels Rd Lompoczip. 93436
REPRESENTING: _	STATES A STATE OF THE STATES O
Do you wish to be added t Please drop comments in t	o the project mailing list? YES NO NO he Comment Box orMail to:
	Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401
	Trongly Support left teurn lones Son to Campbell Rd. We support lanes off 246. Sorny its taking rectify these dangernes
	Please respond by September 17, 2009
How Did You Hear About This Meeting?	newspaper newsletter someone other:
Caltrans*	SBCAG santa barbara county association of governments

Response to Comment from Barbara Kusulas

Thank you for taking the time to comment on the proposed project. The following response addresses your comments related to left-turn improvements along Highway 246 between Cebada Canyon Road and Drum Canyon/Mail Roads. This information has also been added to the document under Section 2.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities.

The proposed Build Alternative includes left-turn pockets at all of the public road connections along Highway 246 within the project limits. These include: Tularosa Road, Hapgood Road (west), Campbell Road (west and east) and Drum Canyon Road/Mail Road. Also part of the project proposal is a 1.1-mile-long continuous two-way left-turn lane from Hapgood Road to 3,800 feet west of Campbell Road (east). The added improvements at the above locations would reduce the possibility of rearend accidents and improve operations on the highway. Once the passing lanes are in place, left turns onto or from private road/driveway locations would be prohibited within the passing lane areas. This means that motorists would be limited to a right turn at these locations. This would be done through the painting of a double-yellow striped 4-foot-wide "soft median" barrier designed to prevent left turns. Left turns would be permitted at the nearest public road intersection where a left-turn pocket would be added and a legal U-turn is allowed. This situation results in out-of-direction travel for distances between 1.4 and 3.3 miles.

This project provides an example where Caltrans must weigh the balance between mobility and accessibility. The passing lanes are needed to maintain mobility and level of service as traffic volumes increase on Highway 246 in the future. Motorists traveling between Lompoc and Buellton consider mobility to be the highest priority of the highway, whereas local ranchers and residents favor maintaining easy access.

Public Hearing Comment Card State Route 246 Passing I NAME: 4076 E Huy 246 CITY: ADDRESS: solves Mende REPRESENTING: Do you wish to be added to the project mailing list? YES Please drop comments in the Comment Box or Mail to Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401 I would like the following comments filed in the record (please print): 1 Thanks Please respond by September 17, 2009 How Did You Hear someone told me about it newspaper newsletter other:



About This Meeting?





Response to Comment from Mendez Ranch

Thank you for taking the time to comment on the proposed project. The project would potentially affect 1.09 acres of private land. A parcel under your ownership is currently identified for potential acquisition. The 1.09-acre portion of the overall 312.09-acre parcel may be necessary to construct improvements near Tularosa Road, which would benefit sight distance. The project design would continue to be refined as the project moves forward. Once the design is finalized, a determination would be made as to whether the property is necessary for the project. If a portion of your property were required, Caltrans Right of Way staff would initiate the acquisition process. A noise study was conducted and concluded there would be no substantial noise impacts.

Your comment regarding entering and exiting onto/from Highway 246 is addressed in the above response to Barbara Kusula. The text has also been updated in Section 2.1.6 of the final environmental document. In addition, it should be noted that concerns for slower traveling vehicles such as farm equipment were part of the reason for adding passing lanes. The ability for people to get around slow-moving traffic should help with making right turns onto your property.



Public Hearing Comment Card
State Route 246 Passing Lanes
NAME: HAUL LARSON ADDRESS: 1876 TULAROSA ROLLOMPOC ZIP: 93436 REPRESENTING: MYSELP
Do you wish to be added to the project mailing list? YES NO Please drop comments in the Comment Box or Mail to: Matt Fowler, Senior Environmental Planner Central Coast Environmental Analysis Branch California Department of Transportation 50 Higuera Street San Luis Obispo, CA 93401
I would like the following comments filed in the record (please print): I AM PLEARED AT THE SAFETY iMPROVEMENTS AT TULA ROCA ROAD: SPECIFICALLY THE LIEFT TURN LAMIE & THE SCOPE CHANGE THAT WILL IMPROVE XISIBILITY AT THE TURN. THESE, IN COMBINATION, WILL SAVIE WYRS AND INJURIES. WELL DON'TE THANK-YOU
Please respond by September 17, 2009 How Did You Hear newspaper newsletter someone other:
How Did You Hear newspaper newsletter someone told me about it other:
Calbrans (SBCAG santa barbara county association of governments

Response to Comment from Paul Larson

Thank you for your support of the project.

4.0 Transcripts from Public Hearing

The following transcript is from the public hearing held in Lompoc on Wednesday, September 2, 2009. Responses to comments are provided at the end of the certified transcript copy.

CERTIFIED COPY

CALIFORNIA DEPARTMENT OF TRANSPORTATION

STATE ROUTE 246 PASSING LANES

Wednesday, September 2, 2009 5:30 p.m. - 7:30 p.m.

PUBLIC HEARING AND PUBLIC COMMENTS held at the Lompoc City Hall Council Chambers 100 Civic Center Plaza Lompoc, California

Reported by: Jeri Cain, CSR No. 2460, RMR-CCRR-CRR File No. 209846



Court Reporters · Videotape Services · Video Conferencing 1151 Leff Street · San Luis Obispo, CA 93401 805-541-0333 · 800-549-3376 · 805-928-7554 San Luis Obispo · Santa Maria · Santa Barbara FAX 805-541-2136 · E-mail: info@MeritReporting.com

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PUBLIC MEETING AND COMMENTS were held at the
    Lompoc City Hall Council Chambers, 100 Civic Center
 3
    Plaza, Lompoc, California, before Jeri Cain, Certified
 4
    Shorthand Reporter, holding CSR license No. 2460,
    RMR-CCRR-CRR, on Wednesday, September 2, 2009,
 5
 6
    commencing at the hour of 5:30 p.m., regarding the
 7
    State Route 246 Passing Lanes.
 8
 9
10
                           INDEX
11
12
    CALTRANS MEETING ORGANIZERS:
13
    DAVID EWING
    JANICE BOWMAN
14
15
16
    SARA VON SCHWIND, Caltrans Project Manager
17
    KATHERINE CARRILLO, Caltrans Project Manager
    MATT FOWLER, Caltrans Environmental
18
19
20
                   PUBLIC COMMENTS MADE BY:
21
22
   EILEEN WYCKOFF RICHARD PATA
   FLOYD WILDER
23
                     PAUL LARSON
   ANGELA SIEFE
24
25
   MARY SALADINO
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PUBLIC COMMENTS 9/02/09

1	LOMPOC, CALIFORNIA
2	WEDNESDAY, SEPTEMBER 2, 2009
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5	MS. SARA VON SCHWIND: The public hearing has
6	officially begun at 5:30 p.m.
7	(Commencing at 6:08 p.m., the following comments
8	were given:)
9	EILEEN WYCKOFF: When the bridge washed out, it
10	caused the closure of 246 for many months. Will
11	widening of the bridge cause the same closure of the
12	road to inconvenience everyone? Don't close the road.
13	But I don't know how they can do it without closing the
14	road.
15	FLOYD WILDER: My name is Floyd Wilder, and I
16	am a resident on Tularosa Road, 1949 Tularosa Road. My
17	telephone number is 735-0040.
18	I have a couple of points to make. The first
19	point is that I object vehemently to an animal or a
20	salamander, or otherwise, crossing. I believe that
21	money could be better spent for safety. A bridge. I
22	can't believe a bridge for salamander crossing. And
23	also it's not been demonstrated that there are any
24	salamanders being murdered on 246. So if you can bring

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out some dead bodies for me, I might be a little more

PUBLIC COMMENTS 9/02/09

sympathetic, but as it stands, I don't want any money spent on a bridge for animal crossing. That's my first 2 3 topic. My second topic is that I disagree with the 4 traffic engineer, and we've discussed this already. 5 Their claim is 65 percent of people driving on 246 6 7 during the peak times are held up, and I do not believe that. Since I live there and commute to Santa Barbara 8 9 on a regular basis, I would contest that vehemently. I would agree that some people are held up but not 65 1.0 percent. Farm vehicles, there are probably not more 11 than 10 or 15 of them in a day, if that, that commutes 12 over that area on Tularosa Road, so I don't know how you 13 can work 65 percent into that. It's just not true. 14 15 That's my two items. I could probably make more, but I don't have the time. My e-mail address is 16 FWilder@Netscape.com. I would like to hear from someone 17 concerning these items. 1.8 Does this get me on the hit list for the brown 19 shirts? 20 ANGELA SIEFE: My name is Angela Siefe. E-mail 21 is Siefes@best1.net. I currently live at 1900 Tularosa 22 Road. I've lived there for approximately 10 years. My 23

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husband is Dr. Siefe, and he has written numerous

letters and e-mails to Caltrans commencing in 2000.

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PUBLIC COMMENTS 9/02/09

My husband was rear-ended on 246 in 2004, and he was hit approaching Tularosa from Lompoc. He was at a stop and was hit by a Ford pickup at approximately 65 miles an hour. His car was totaled, and it's a blessing that he even lived through that to be here today.

So that is my concern for making my comments about the passing lanes and the turning lanes on the 246 project. We have also attended public information meetings on July 16th, 2008, which addressed the left channelization and merge lanes. And my question -- one of my questions is: How many families are on the other proposed turn lanes? We have approximately 40 families on Tularosa Road, and we're currently zoned RR-5, which is residential ranchero, five acres. We're allowed two residences per property, which basically means that we can have 80 families living on Tularosa Road. And at the present time, I believe there's only three that have additional residences. And my concern is, has Caltrans considered this in the proposed project?

And we also have a new road. It's called Tularosa Lane that's not projected on their sheets here for any of the information we have tonight. And that was put in place by the fire department. So there are additional residences that are not on Tularosa Road, they are on Tularosa Lane, and I don't know if they have

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PUBLIC COMMENTS 9/02/09

taken that into consideration either.

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There's also a proposed development at the end of Tularosa Road that's approximately 80 acres which would mean if that goes through in the near future, there would be an approximate 16 more residences that are RR-5, which means another 32 families on Tularosa Road, which now we're talking potentially 100 families that would be living on Tularosa Road.

Areas of concern I have on this project are the same ones. We always have morning fog. The visibility is poor. They are projecting a class-3 bike lane. And currently people fly by me going 65 miles an hour in the bike lane that's there, so I don't know how that's going to work. People continue to pass at high speeds on the shoulder. It doesn't matter whether you're stopped, slowing. I put my emergency blinkers on to slow traffic down. I do whatever I can. But when we have a potential problem like the Highway 1 closure in 2005 -- it was closed for over six months -- then we had all the traffic from both those avenues coming through our corridor, and we would wait for not seconds but minutes -- minutes and minutes, up to five minutes, six minutes, to make a left-hand turn.

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Highway 1 was closed, so many accidents that Caltrans

There was a fatality a few months after

PUBLIC COMMENTS 9/02/09

never even responded to because they haven't been of great enough nature. So, you know, my concern is the long-term projections of Highway 246. Would Caltrans — it's a \$50 million project. You know, it seems to me if you are going to spend that kind of money rather than building it to suit right at the moment, that they would be a little bit more forthright in the projections of the future on what needs to happen for that road, and I think the lowering of the hill is all well and fine, but I think that the amount of families that would end up on Tularosa Road with the turn lane that they have, I still don't think it's enough.

My husband already wrote a letter -- he e-mailed his letter on August 30th and again today, and he did finally get a response today that they had logged his concerns. But I have probably 20 letters here.

Every time there was an accident on Tularosa Road when we first moved there, my husband was concerned about it, and up until about 2006, he wrote a letter every time he was aware there was an accident or we witnessed an accident, and it got to the point where it just wasn't worthwhile.

So he knows these people on a first-name basis. I think one of them is Keith Hinrichsen. He's an associate transportation planner in San Luis Obispo.

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PUBLIC COMMENTS 9/02/09

I think this is one of our contacts here, as well as Joni Gray, our supervisor, and all the standard staff. 2 3 Thank you. MARY SALADINO: 1800 Berkeley Drive, Lompoc. 4 think the project is going to be a good improvement. 5 However, if we ever do get the rains that we need, 6 7 you're going to have major mud and flood problems. You're probably aware that in the past, we've had 8 9 bridges wash out all around us, and north of Vandenberg Air Force Base, on the way to Santa Maria, you know that 10 road has washed out tons of times, so the soil is not 1.1 stable, I guess I should say. It's not clay that holds 12 it together. I guess you already know this, but if 13 you're going to make a new bridge at Santa Rosa Creek to 14 widen the traffic patterns, be absolutely sure it's a 15 strong bridge because the water comes down from four 16 different hills, four different directions, and collects 17 right there. And it looks harmless, but it gets a lot 18 of water in the winter, and sometimes we get major rains 19 here. So give us strong bridges at Santa Rosa Creek. If it's not strong, you'll just have to do it again. 21 The only other thing is the mud that might 22 flow. Just make sure they know what to do with the mud. 23 RICHARD PATA: Address is 3500 Jalama Road, 24 Lompoc. E-mail is: RichPata@gmail.com. I would like 25

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to see 246 four-laned from Domingos Road into Lompoc. Some people think that improved roads bring increased traffic. This is not true because the current state of 246-Highway 1 has been there since the mid-1960s and traffic has increased a lot. I'm not sure how much, but it's increased a lot.

There are way too many accidents on these roads around here for the amount of traffic. The current roads that we have in this area were improved so that farmers would have better roads to get to the local communities. They were not intended to be used for commuter traffic for people to get to Santa Barbara to work that used Lompoc as a bedroom community.

I think Environmental Impact Reports are necessary and protecting endangered species is necessary, but I do not think roads being improved should be hampered by protecting endangered species when so many people are getting killed in traffic accidents on these roads.

There is still a lot of slow-moving farm equipment being -- still a lot of slow-moving farming equipment that is using these present roads and people now days are not accustomed to encountering slow-moving farm equipment when traveling on these roads. They have no farming background and are unaware of wide slow-

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moving equipment. PAUL LARSON: E-mail is PLarson@westmont,edu. There are two safety mitigations that I had in mind, and 4 both of them are in the plan. I was very pleased to 5 find that out. The slope of the highway allows turners 6 presently to be in a turning position without being seen 7 by oncoming traffic until it's very near the point where 8 they have to come to a quick stop. So that's very 9 unsafe. And that slope -- changing the slope is going to mitigate that a lot. It's very good. I thought that 10 was the first thing to change. 11 12 The second thing to change is to add a passing lane for the left turn. It's a one-way turn. So adding 13 a turning lane was very significant. Thank you for 14 doing this. 15 16 DAVE EWING: It's 7:30. The public hearing is 17 now officially closed. 18 (The public meeting concluded at 7:30 p.m.) -000-19 20 21 22 23 24 25

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No. of Contract of	1	REPORTER'S CERTIFICATE
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	4	STATE OF CALIFORNIA) SS.
	5	
	6	I, JERI L. CAIN, Certified Shorthand Reporter,
	7	RMR-CCRR-CRR, holding California CSR License No. 2460,
	8	do hereby certify:
	9	The public comments were reported by me by the use
	10	of computer shorthand at the time and place herein
	11	stated and thereafter transcribed into writing under my
	12	direction.
	13	In compliance with Section 8016 of the Business and
	14	Professions Code, I certify under penalty of perjury
	15	that I am a Certified Shorthand Reporter qualified to
	16	administer oaths in the State of California, and hold
	17	License No. 2460 in full force and effect.
	18	WITNESS my hand this // day of September, 2009.
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	22	JERI L. CAÍN, CSR #2460, RMR-CCRR-CRR
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Responses to Transcript Comments

Response to Comment from Eileen Wyckoff

Although staging during project construction has not been fully determined, it is likely that traffic would be shifted back and forth during construction on the Santa Rosa Creek Bridge and Highway 246. Two-way traffic would occur during most stages of construction, but there may be a need to periodically limit it to one-way traffic.

Response to Comment from Floyd Wilder

Thank you for your comments. Your opposition to salamander mitigation is noted. However, improvements on Highway 246 would not be able to move forward without the mitigation measures that have been incorporated into the proposed project. The U.S. Fish and Wildlife Service and California Department of Fish and Game are responsible for regulating species under the Federal Endangered Species Act and the State of California Endangered Species Act, respectively. Since the proposed project is funded by both state and federal money, Caltrans must comply with these regulations.

The California tiger salamander is the focus of concern along this highway corridor. The U.S. Fish and Wildlife Service noted that expanding the width of pavement in the vicinity of the ponds would not be allowed without mitigation due to the potential to jeopardize the California tiger salamander population. Essentially, without features to facilitate the movement of salamanders from upland habitat to breeding ponds, there would be no project. The lack of evidence or "bodies" is due to the fact that salamander move at night. If a vehicle strikes them, their bodies disappear quickly thanks to nearby predators. Records from the Santa Barbara Museum of Natural History noted road kill specimens of California tiger salamander collected along Highway 246 within the area where most of undercrossings are proposed. Please refer to Section 2.3.5 in the final environmental document and the recently issued Biological Opinion from the U.S. Fish and Wildlife Service (Appendix J) for further explanation.

Your disagreement with the traffic data is noted. Traffic operations on two-lane, two-way highways differ from those on other uninterrupted-flow facilities such as multi-

lane highways or freeways where motorists can change lanes and pass slow-moving vehicles. On a two-lane highway, lane changing and passing are possible only in the face of oncoming traffic in the opposing lane. Passing demand increases rapidly as traffic volumes increase, and passing opportunity in the opposing lane declines as volumes increase. Therefore, on two-lane highways, unlike other types of uninterrupted-flow facilities, normal traffic flow in one direction influences flow in the other direction. Motorists must adjust their travel speeds as volume increases and the ability to pass declines. With the initiation of the soft median barrier project in July 2010, passing opportunities would be reduced within the project limits. The soft barrier would cause the percent-time-spent-following to increase.

Percent-time-spent-following represents the freedom to maneuver and convenience of travel. It is the average percentage of travel time that vehicles must travel in long lines behind slower vehicles (e.g. large trucks, buses, passenger cars, or farm vehicles) due to the inability to pass. Percent-time-spent-following is difficult to measure in the field. The percentages are calculated using a prediction model. The formation of these long lines of backed up traffic is indicative of delay. However, the percentage of vehicles traveling with headways of less than 3 seconds (the time between two successive vehicles) at a given location can be used as a measure. Keep in mind that the passing lanes are designed for the 20-year forecast traffic demand. Their need may not be as strong now, but would become more necessary once the soft median barrier is introduced and traffic volumes increase over time.

Response to Comment from Angela Siefe

Thank you for your comments. We appreciate your concerns about this corridor, especially the ingress/egress at Tularosa Road. The accident rate along this corridor has been analyzed and found to be below the state average with the exception of Purisima Road/Highway 246.

The project proposal includes improvements that should make it easier to make left turns at the Tularosa Road location. Please see the response to Barbara Kasulas in regard to left-turn pockets and access onto/from private driveways and private roads. In regard to improvements at Tularosa Road, future traffic data was analyzed using the SBCAG Travel Demand Forecast model. These models do consider planned development included in the County's General Plan, but may not include developments such as the 80-acre development you referred to or projects such as the recently proposed Space Center. Proposed new developments and/or projects are required to submit a Traffic Impact Study as a condition of approval.

The speed limit is set in accordance with the California Vehicle Code (CVC) for a rural two-lane highway facility at a maximum of 55 miles per hour or lower. Caltrans cannot artificially lower the speed limit without justification. The 85th percentile on Highway 246 is above the posted 55-mile-per-hour speed limit, which is typical of all the rural two-lane highways in the district with a 55-mile-per-hour posted speed. Caltrans is required to set the posted speed at the 85th percentile speed.

Response to Comment from Mary Saladino

Thank you for sharing your concerns regarding the bridge and potential flood and mud problems within the project limits. When the bridge was replaced as an emergency project in 1999, a single-span (no piers) bridge was built that was designed to accommodate 100-year flood flows with over 3 feet of extra capacity. Caltrans staff is aware of runoff problems and the soil instability that exists in and around the project limits. Drainage improvements are planned as part of the project. Extra caution would be taken to ensure aggressive erosion control techniques along with landform grading to address slopes greater than 1:4. Please refer to Section 2.2.3, which has been changed to highlight this issue. The following mitigation measure has been added: A comprehensive revegetation and erosion control plan would be incorporated into the design. Where appropriate, slopes will be minimized and rounding will be implemented. Disturbed areas will receive a compost layer and hydroseeded with a native seed mix appropriate to the region.

Response to Comment from Richard Pata

Thank you for your comments. Please see the response to Mr. Ruhge earlier in this appendix as it addresses your concerns related to traffic volumes and commuter traffic. Please see the response to the Mendez Ranch earlier in this appendix as it addresses access to/from private roadways. Please see the response to Mr. Wilder earlier in this appendix in regard to endangered species laws that require compliance on public projects.

Response to Comment from Paul Larson

Thank you for your comments and support of the project.

Appendix I Opportunity for Noise Berm Letter to Property Owner

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor



DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET SAN LUIS OBISPO, CA 93401-5415 PHONE (805) 549-3101 FAX (805) 549-3329 TTY 711 http://www.dot.ca.gov/dist05/

Flex your power! Be energy efficient!

February 9, 2010

James and Judith Holden 1112 Orchid Street Lompoc, CA 93436

Dear Mr. And Mrs. Holden:

RE: HIGHWAY 246 PASSING LANE PROJECT: POTENTIAL TRAFFIC NOISE IMPACTS TO YOUR PROPERTY AT HAPGOOD ROAD/HIGHWAY 246 (4835 E. HWY 50; APN 99-100-043)

The California Department of Transportation (Caltrans) is considering a highway improvement project on a 9-mile segment of Highway 246. The project would include passing lanes and left turn pockets between Cebada Canyon Road and Drum Canyon/Mail Road. While there have been several previous notices mailed to you advising of public meetings for the project, the purpose of this notice is to explain the results of a noise study prepared for the project and how it affects your property.

A noise analysis was completed using traffic projections for future years to determine whether the proposed project could have a potential impact on any residences within the corridor. The noise study concluded that your property would be negatively impacted by the project due to the close proximity to the highway. The data shows that with or without the project, noise levels on your property are predicted to exceed the noise abatement criterion of 67 dBA in the project design year of 2035.

Once a determination is made that a project meets certain noise thresholds, Caltrans is required to consider noise abatement for any affected properties (per the Noise Assessment Protocol). The proposed abatement meets the reasonableness test because it would provide a noise reduction of at least 5 decibels and would also meet the cost benefit ratio prepared by the Engineers.

The Engineer is recommending a 300-foot long earth filled berm be constructed within the Caltrans right of way along the front of your property. The berm would measure six feet in height from the base elevation of the residence.

Prior to incorporating the noise berm into the project design, Caltrans must provide the property owner with the option of accepting or declining the noise abatement option. For noise related questions please contact Karl Mikel at (805) 542-4792 or karl_mikel@dot.ca.

Sincerely,

Yvonne Hoffmann Associate Environmental Planner

Cc: Apurva Gokal, Project Engineer Paul Martinez, Project Manager

Environmental File

Attachment: Noise Abatement Option form

"Caltrans improves mobility across California"

Property Owner Response

A noise berm may be constructed adjacent to your property as part of the proposed Highway 246 Passing Lanes Project.

Name M Holde Address M. Tompor Sip 93486
I want an earthen noise berm constructed. I do not want an earthen noise berm constructed.
Comments

Please respond by March 10, 2010.

If no response is received, your lack of response will be considered in support of noise berm construction.

Thank you for your time participating in this survey, we appreciate your input.

Appendix J Biological Opinion Issued by U.S. Fish and Wildlife Service

Attached separately

List of Technical Studies that are Bound Separately

Air Quality Report
Noise Study Report
Water Quality Report
Natural Environment Study
Location Hydraulic Study
Floodplain Evaluation
Hazardous Waste Reports:

• Initial Site Assessment

Historical Property Survey Report (public review restricted)

- Archaeological Survey Report
- Extended Phase I Testing Report
- Supplemental Extended Phase I Testing
- Historic Resources Evaluation Report

Initial Paleontology Study Traffic Operations Analysis (Level of Service Report) Visual Impact Assessment